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SCHOOL ORGANISATION

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BY

S. E. BRAY, M.A.

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"BRITANNIA'S REALM," ETC.

WITH AN INTRODUCTION BY
SIR JAMES YOXALL.

Second Edition, Revised and Enlarged



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PREFACE.

THE first edition of this book, intended primarily for students in training, showed many signs of the haste with which it was written; but notwithstanding its defects, the work has been appreciated beyond the author's expectations. The present edition, re-arranged, and to a large extent re-written, in no way departs from the purpose of the first edition. Its empirical character still remains the chief feature; but many additions have been made and revisions carried out in order to bring the work into line with the most recent official requirements, and into closer touch with the more advanced educational thought.

The changes of the past few years show in a marked degree, the great progress made in all that concerns the care and education of the child. From empiricism, from psychological investigation and medical inspection, is gradually emerging a more exact and comprehensive science that must ultimately bring within its scope every phase of educational work and fix the principles that should govern each series of steps in the educative process: and this upward tendency and the advancement already made have not been lost sight of in the present work. Indeed the author has not been content to specify only what must be done; he has sought to point out also what should and can be done, in the way of organisation, and within the limits of the elementary school, to further the development of the

whole child. He hopes, therefore, that this new edition will not only meet the wants of the student in training, but will also prove of real assistance to the practical teacher.

The writer is especially indebted to Lyster's *School Hygiene*, published in the same series as the present volume, for much valuable information on school premises and general hygienic conditions of school life.

For the sake of brevity and simplicity, the teacher in these pages has generally been referred to as a "Master." The book is, however, intended to apply to the conditions of teaching and organisation in all departments of the school. The word "Mistress" may therefore be read everywhere for "Master" or "Teacher" except where the contrary is implied or distinctly specified.

The Author is conscious of the honour of being associated, in this work, with Sir James Yoxall, M.P., who has contributed the Introduction, and who is eminently fitted to deal with such a wide and important question as the position of the Elementary School in a national system of education.

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THE PLACE OF THE ELEMENTARY
SCHOOL IN A NATIONAL SYSTEM
OF EDUCATION.

BY

SIR JAMES YOXALL.

I.

WHAT in a rational scheme of national Education is the due place and scope of the elementary school? No official answer to that question has ever been given in England. A whole volume of the "Special Reports" has been devoted to "Preparatory Schools for boys: their place in English public Education";¹ but where is the companion treatise, on the place and scope of English elementary schools? It is still to seek: we possess no constructive plan, no reasoned thesis to go by; in this vastly important department of education we go haphazard, blundering along. Who in this country has from a seat of authority discussed philosophically or scientifically determined the true rôle and function of the Voluntary and Council Schools? What President of the Board of Education, or what Secretary? What Matthew Arnold among the Inspectors? Too much "cumbered with serving," they have found no time to lay down the ground-plan on which the typical elementary school should be built.

¹ Special Reports on Educational Subjects, Vol. 6: Board of Education, 2s. 3½d.

The first "Special Report" to the Board of Education ever published had for title "Public Elementary Education in England and Wales, 1870-1895"; but confessedly it aimed "at showing in a statistical form the progress which was made towards a general provision of elementary education in England and Wales during the first quarter of a century from the passing of the Elementary Education Act, 1870": enumeration and quantities, not quality or fitness, were the theme.

That is largely true of Education Blue-books also. Many pages of statistics, chronicles, and records of Acts and facts concerning elementary education in Tasmania, Ireland, Malta, and so forth, can be found in the long row of volumes of "Special Reports," but they do not help much in the search for a reasoned basis and criterion for an English public elementary school. In this regard, at least, the department of Special Inquiries and Reports has been an unintelligent Intelligence Department. So inveterate is our English habit of dealing only or mainly with facts, the concrete, and the obvious, that even the Special Reports from abroad do not enlighten us as to what the spirit, essence, and conception of an elementary school in Holland, Sweden, Austria, or France are supposed to be.

Prefatory Memoranda and Introductions appear as frontispieces to school Codes, but, admirable as they are so far as they go, they are didactic and exhorting, not philosophical; they hint, suggest, or command what a public elementary school may do, and how it may be done, but they do not answer the question "What in a national scheme of Education is the place of the Elementary School?"

The Introduction to the Day School Code appears to open hopefully in that respect. "The purpose of the

Public Elementary School is"—it begins;—but it continues, "to form and strengthen the character and to develop the intelligence of the children entrusted to it." Yes, yes, but what children *should* be entrusted to it, is what one wants to know; and there is no answer except the implied, the English answer, "The children who are." Another aim of the public elementary school is "to make the best use of the school years available," this Introduction goes on. Yes, yes, again,—but *what* school years? Which, and how many, ought the school years of an elementary school child to be? "The Education Acts answer that" would be the characteristic, English, official reply. Yet Education Acts ought to be shaped by, and not to shape, the English idea of an elementary school.

In the "Suggestions for the consideration of Teachers and others concerned in the work of Public Elementary Schools" it is said that "the work which the Nation expects its Public Elementary Schools to do has been stated with general acceptance in the Introduction to the Code"—the very document which has just been criticised! And further, "that the regulations of the Code are designed in the first instance to serve the necessary purpose of setting forth the conditions which an elementary school must satisfy in order to obtain the Parliamentary grants available for Public Elementary Schools." Was ever anything more blank and wooden?

We are searching round a "vicious circle" when consulting official documents to discover what is the true place and scope of the elementary school. The writers of these documents appear to take the elementary school for granted. "We know what it is, *you* know what it is" they seem to say to the reader. "What need for words about what it ought to be or might be?" So far as I can discover, nobody has ever attempted to discuss the "idea"

of a public elementary school in the way a great writer discussed "The Idea of an University." Yet perhaps the public elementary school ought to be made the University College of the young and poor.

We have gone for four and twenty years without any inquiry into this matter by a Royal Commission: the Royal Commission on Secondary Education in England did not profess to enter that field. Indeed, I might say we have gone for fifty years, because the "Commissioners appointed to inquire into the Elementary Education Acts, England and Wales," who reported in 1886, considered everything except the idea, the place, the scope, the aim, the proper purposes and dimensions of the work of a public elementary school. There was only one section of their Report which touched upon this subject: it was headed "Elementary Schools and Higher Education," an illusory title; the sub-heads indicate what really was discussed. They are these: Varieties in local circumstances—Grouping of small schools—Grading of schools.

The Commissioners reported that "In theory, every elementary school is looked upon by the Education Department as conforming more or less to one well-defined type." But *which* type? Did the Commissioners ascertain, consider, criticise, and intelligently deal with that "well-defined type"? They did nothing of the sort. This is how they described the "well-defined type":—"If it is not an infant school, then it is one in which, as far as the Department is concerned, the children may be presented for examination in the fullest possible curriculum of the Code." Could anything be more circular in reasoning, more chaffy in grain? The real question surely was, "Is 'the fullest possible curriculum' too full, or too meagre,—is it a curriculum suited to what should be the scope and purpose of a public elementary school?"

But, leaving that alone, and the elementary school where it was in 1886—still in the Egyptian thralldom of “Payment by results,”—the Commissioners went on to maunder amiably about Higher Elementary schools, exhibitions and scholarships to Secondary schools, and “candidates ignorant of Latin.” Nebulous at the top and infirm at the base, that Report soon sank into neglect and nothingness; it died early, unlamented. Out of its ashes I dig the following flinty piece of stupidity about education:—“The instruction to be paid for out of the rates and taxes should be fixed by the Legislature. Until this is done the limits of primary and secondary education cannot be defined.” Of course they *can*; but who is certain that they ought to be, or that “overlapping,” as it used to be called in Parliamentary debates, is not to some degree inevitable, and even desirable?

Narrow-eyed, unintelligent, dense, the official volumes stand in rank before us like a row of cloddish children in a class-room. We ask them for educational bread and they give us a stone. Need I further prove that when a mere unofficial observer and *amateur* educationalist like myself is asked to write, in this book, about the place of the elementary schools in a national system of Education, though he may have the whole range of the House of Commons library and official records at his disposal, he searches the shelves of authority in vain?

II.

Or almost in vain. In Volume IV. of the “Special Reports” one gets some illumination, from abroad. That volume contains the text and translation of a paper by Professor Rein on “Tendencies in the educational systems of Germany,” and affords some glimpse of the “idea” of

an elementary school. Dr. Rein goes to theory; he gets away from the actual, unsatisfactory facts towards a partly realised ideal. "Our schools," he writes, "have been rightly called centres of spiritual nourishment. Among them the primary school takes the most important place, since ninety per cent. of the nation gain their spiritual food therefrom."

So that at last we find it stated, indirectly, in an English official publication, that the place of the elementary school is the most important place in a national system of education. Upon that basal statement one could found a theory, and call for an edifice of practice. That is what Professor Rein goes on to do (I amend the English wording here and there): "We must therefore insist that the elementary school shall be well appointed and formed on an appropriate model. It must be so created as to promote social well-being. Even to-day the primary school is, in many ways, regarded as only a sort of school, merely for the poor, just good enough for imparting a necessary minimum of knowledge and ability, to the children of the masses."

But "we must break once and for all with this inhumane and non-Christian conception" Dr. Rein goes on. "We must demand to have one and the same primary school for all children, of every social class. Let it form a common foundation, and be the broad support of our whole educational system, giving living expression to the idea of unity among all the members of our nation. Schools, at any rate, are not called on to encourage class distinctions, and intensify such divisions. Like the Church, the first duty of the school is to try to affirm our common humanity, to act as a reconciler, to check the tendency towards divisions, and to proclaim the idea of national unity aloud. For these reasons we demand a

common, general, primary school. The preparatory departments attached to secondary schools must be abolished."

These be "brave 'orts" to utter, even in the land of Stein and Humboldt; but Professor Rein went on to declare that "I can count on complete agreement with these views in Germany. The Prussian Minister of Education is a warm supporter of the idea of a common primary school, the whole body of German elementary school teachers have inscribed this demand upon their banners for the last ten years"—1887 to 1897—"and the common primary school is already a reality in Bavaria."

That, no doubt, is why the elementary schools which I have seen at Munich are such splendid monuments of communal provision and general educational efficiency; but we are dealing with England here. So that next door to these exalted quotations from Dr. Rein I must needs place Professor Sadler's reluctant judgment, expressed in the volume of Special Reports on Preparatory Schools. At page 83, dealing with "the place of the Preparatory School for boys in Secondary Education in England," he tells us that "Opinions differ as to the degree in which social distinctions might be lessened or removed by requiring, at least for the first stage of their education, the children of all classes in society to attend the public elementary schools. It is unlikely that such a requirement could be enforced unless public sentiment were overwhelmingly in favour of it."

Professor Sadler evidently regrets that public sentiment is not inclined that way, and he thinks that few will doubt that the preparatory boarding-school system "tends, far more than any day-school system can ever tend, to keep together in rather isolated communities boys drawn from the wealthier kind of homes," and so in some measure to deprive such lads of the experience of mixing habitually,

on equal terms, and measuring themselves intellectually, with boys who "have felt the spur of poverty." But, he adds, "it would be misleading to imply that fashion and social prejudice are the chief causes of the present practice. Careful sifting of comrades, and protection against indiscriminate influences, especially during childhood, are regarded by English parents generally as an advantage for their sons, as well as for their daughters."

That discreetly but exactly states the English position in this respect. And English parents "of the wealthier kind" will defend that position successfully for many a year to come. The Board of Education regulations therefore recognise differences between "elementary," "primary," and "preparatory" schools and classes. Scotland used to be a democratic land in this matter; it was long a Scottish boast that the son of the laird sat upon the same bench as the son of the herdsman, in a school that was neither "elementary" nor even "primary" alone, and "Public elementary" is a prefix to a school name unknown in North Britain yet. But the last decade has witnessed a tendency towards separatism even there, and the Lords of the Committee of the Privy Council on Education in Scotland determined early in the year 1910 to use the following distinctive nomenclature, which bears on the subject of this chapter:—

Primary School.—A school, or a department of a school, giving an education based entirely upon English to pupils who are, as a rule, below the age of fourteen. A primary school may contain individual pupils or small sections of scholars who are being instructed on the lines of an intermediate school.

Intermediate School.—A school providing at least a three years' course of instruction in languages, mathematics, science, and such other subjects as may from time

to time be deemed suitable for pupils' who, on entering, have reached the stage of attainment in elementary subjects which enables them to pass the qualifying examination.

Secondary School.—A school providing at least a five years' course of instruction as aforesaid beyond the qualifying examination stage.

So that the particular "place" of an elementary school in a system of national education, for which Professor Rein began to strive successfully in Germany some twenty-five years ago, is a "lost cause" in Great Britain; if indeed it was ever a "cause" at all. Alone, or almost alone in this country, the National Union of Teachers champions it, as the German Teachers' Union does in Prussia, Baden, Saxony, and Würtemberg. It is a "counsel of perfection" too high for British reach.

III.

Our search through official documents, bearing the *imprimatur* of the Board of Education, has discovered this much, directly or indirectly, therefore:—

- (a) Educationally the elementary school ought to be, but for social reasons in England and Wales cannot be, the primary school for all children in its area.
- (b) "Elementary" schools, "primary" schools, and "preparatory" schools and classes cannot be treated on similar lines.
- (c) The elementary school is a primary school with a particular field, and must receive a special treatment, as the "preparatory" function of an elementary school has reference, in the main, to a period when school-days have ended.

For the rest we are driven back upon "common knowledge," and ourselves. And still, at the end of this already lengthy preamble, the question poses itself: "What, in a rational system of national Education, is the 'idea,' place, and scope of an elementary school?"

The temptation to a writer is to consider that query in the abstract, and to build an educational *château en Espagne*. But not in Spain, nor, so far as I know, elsewhere, except in some parts of Germany, can the ideal elementary school be realised; and what is to the purpose here is the "place" of an elementary school in England and Wales. To the degree in which ex-scholars of elementary schools in Wales enter Welsh secondary schools—a higher proportion than is the case in England—the problem is not the same in England as in Wales. But the difference is slight, after all, and for practical purposes we may disregard it.

So we may say that in South Britain,

- (1) The elementary school is, and is still to be, *the* institution for educating children who come from other than "the wealthier kind of homes";
- (2) The elementary school is to deal with children of ages between three and fifteen years;
- (3) Only a very small percentage of them will proceed to secondary, or any day continuative schools;
- (4) For years to come only a small part of the total of such children will proceed to evening schools and technological institutions;
- (5) the products of the elementary school will be almost wholly ranked—at first, even in the case of exceptions—among "the working-classes";
- (6) It is the elementary school or none, therefore, for the commonalty as a whole.

These are the conditions and circumstances which

official documents take for granted ; so much for granted, indeed, that even to mention matters so obvious did not seem to be necessary. Parliament, the Board of Education, and Local Education Authorities take them for granted. So let us too take them for granted, since we must. But let us also endeavour to perceive what "idea" of a public elementary school arises from these *data*, like an emanation and an aura. What should be the model of a public elementary school in these conditions ? To what criteria may it reasonably be expected to conform ?

IV.

From the circumstances, limitations, and other considerations already mentioned, it follows, I think, that the place, scope, and function of an elementary school consist in—

- (a) Giving to the great majority of its pupils all the direct and specific scholastic teaching and training which they will ever receive ;
- (b) Preparing a fraction of its pupils to enter secondary or other continuative schools by day ;
- (c) Enabling a part of its pupils to proceed to evening schools and classes :
- (d) And, of course, also, scholastically preparing all its pupils, either solely as in (a), or partly as in (b) and (c), for entrance into the full responsibilities, opportunities, and duties of industrial, political, moral, intellectual, and spiritual life.

Therefore Professor Rein inevitably claimed chief importance for the primary school ; its great "place" is allotted to it by the very circumstances and prejudices

which seem to limit and minify it. Its function is to school the masses; as the man who did most to hinder the popular education which he controlled is said to have said, "We must educate our masters." A new meaning and definition is gradually being given to the phrase "the governing classes": *les classes dirigeantes* are ceasing to consist of the few, they are becoming the multitudinous classes in the nation. With this political change, the kind of school which educated a Canning and a Gladstone is ceasing to be the most important kind of school, considered nationally; elementary schools bear such responsibilities towards the millions that the responsibilities of Public Schools to the upper myriad seem, by comparison, small. Compulsory education of the people has been decreed—"longo post tempore venit"; the people are ceasing to be the *bas peuple*, and their education can no longer be treated *de haut en bas*.

It is not mere enthusiasm—it is mere justice—to claim that the elementary school ought now to be magnified and ennobled therefore. Not paltry, not starven, not inefficient should be the only schools which the bulk of the nation will ever know. Moreover, the elementary school ought not to be merely and coldly efficient; it should be honoured and inspiring. The best that has been thought and done about other schools should be applied to the elementary school, so far as may be. Emotions and inspirations such as centre around the names cut in the wainscot at Eton, or on the School Memorials at Rugby, ought to be, and might be, evoked by past or present membership of a long-established elementary school. The school-motto and the school-song ought to be features there too: "Forty years on" need not exclusively appeal to Harrovians. The *esprit de corps* might be the same in essence, if not in degree.

I am not sure that it might not be something higher, indeed. The boys of a Public School are not so early to become breadwinners, and in that sense men, as are those who quit an elementary school at thirteen or fourteen; the pathos, and the stern duty, of the working-class lads' lives in the immediate future ought to be present to the mind at every school-meeting, an inspiration to the teachers in their work, and a special bond of sympathy between the children. A particular kind of "solidarity" is therefore possible in the elementary school.

V.

Two small books, in fawn-coloured binding just touched with gold, stand on the "shelf of favourites" in one of my bookcases; they are *Edward Thring as Teacher and Poet* and *Uppingham School Songs and Borth Lyrics*. Every teacher ought to be a poet in his way; inarticulate in verse, may-be, but imaginative and perceptive in his soul. Reverence and compassion are due to be taught, and Thring's favourite motto, next to his "*ora et labora*," was Wordsworth's well-known line, "We live by admiration, hope, and love." Hapless the school where the teachers do not comprehend that "admiration, hope, and love" are the great psychical levers. "Light up the magic lantern of common words and things," Thring counselled. "Work from the inside outwards. . . . A teacher is one who sows seeds of life and fosters them. Have done with dry bones!" These adjurations do not apply to Public Schools alone. And again,—

"Each morn they meet, the young, young feet;
They lightly come and go,
A changeful stream, that still doth seem
The same, and still doth flow.

The stream shall run while shines the sun,
 And still the buttressed stone
 Shall hear the beat of young, young feet,
 And count them all its own."

Need this, and all that it stands for—the historic continuity of school life, its elders and the youngsters, the "old boys," the *genius loci*, the fraternal spirit of the place, the carrying on the torch—have reference to Uppingsham alone? Schools do not live by grants and rate-aid only,—wealth cannot make a noble school, or poverty in a slum alone make a school ignoble. In many an elementary school this Uppingsham spirit lives: it ought to dwell in all. Nothing of what is best in the Public School spirit need be foreign to its humbler congeners. If the chief virtue of a Public School is the preparation it gives for life, all the more need for that spirit in an elementary school, because no University years follow upon its preparation. And I say again, that in the national comity we ought to magnify, ennoble, and glorify the place and function of the public elementary school.

VI.

Since the elementary school cannot be "preparatory" in the technical sense of the word, except for a few of its children yearly, it should be self-complete. Its curriculum, aims, and methods ought not to be subordinated to those of a Higher Elementary or a Secondary school. A peril of the scholarship system lies in its modifying the elementary schools unduly. An elementary school should be an independent entity, not parasitic, not ancillary even, but living with a life of its own in a place of its own; it should be a complete and integral educative entity, so far as it goes or can go. It should therefore be considered and

treated as a self-contained institution, not correlated with any "finishing school." For it is in itself the only "finishing school" which eight out of every ten of its children will ever know.

Trade Union Congresses and Labour Parties stand alone in demanding that Secondary Education shall be provided for every child, and I do not see any near prospect of that requirement becoming effective. It is therefore more practical and timely to consider what can be done for the millions of children who will never enter a Secondary school. This consideration profoundly affects the elementary school's "place" and function. Part of that "place" and function is, no doubt, the preparation of a few children annually for examinations which frank them into Intermediate or Secondary places of instruction, but these will be youngsters seldom more than twelve years old. The great work and principal "place" of the elementary school must consist in educating the others.

So that curricula and tests for Junior or Minor Scholarships ought not to be permitted to condition the teaching of upper classes in an elementary school; those upper classes should not be improperly affected by circumstances and plans which govern schools to which the children in those classes will never go. Part of the ennobling and magnifying which I advocate lies in the treatment of the upper classes as a top and crown to the whole school. If the school is to be an entity, a complete and integral whole, it must not be reft of the classes which give, or should give, the tone to the whole school. The hero-worship of Smith minor for Brown major is a considerable asset in the influence of a Public School; it should have its counterpart in the humbler institution. An elementary school ought always to include a full "upper form."

I think it follows, therefore, that, for these reasons expressly—I go no further than these—the Higher Elementary or higher-standard schools are not desirable appendages to an elementary school system; an elementary school cannot be organised to the best purpose if it is truncated, at the Fifth or other class level. And, similarly, the creation of Senior departments—Mixed, Boys, or Girls—is to be deprecated: they rob the whole institution of unity; an elementary school cannot beneficially be cleft in twain. And there should be a continuity and organic connection—a sequence and prolongation of personality, so to speak—between the Infant Department and the other sections; children should feel themselves members of a *School*, not of a department merely. A school should throb with the same life throughout; for out of this corporate life arises, like an aura and emanation, the “idea” of the elementary school.

VII.

That “idea” has now become more clear to the reader of these pages than official Reports and documents had made it, I hope; at last we apprehend, in outline, what at their best are the true place, scope, function, duty, privilege, and glory of a public elementary school. But there is still one important respect to consider,—the invitation to study in years when school-days are done.

It is good for an elementary school to induce in its pupils a liking for handiwork, house-work, readiness and neatness with tools or utensils—a knack for drawing, measuring, sewing, planning out, constructing, contriving and arranging—a love for gardening and Nature-lore—a delight in music, pictures, recitations, folk-song—a pleasure in bodily exercises, drill, gymnastics, journeyings afoot, and organised games for adults—a power of intelligent and

accurate observation, and so on ; these, and the lessons in temperance, modesty, the causes and preservation of health, civics, morals, and the Bible will prepare the children for after life. But more useful than all (because it will help in all) is the inducing of what the Introduction to the Day School Code calls "a taste for good reading and thoughtful study," so that the ex-pupils may increase and deepen their knowledge during their after-years.

The flourishing of evening continuation schools, technological classes, schools of art, Polytechnics, and so forth largely depends upon that. So does the flourishing of literature rather than the "yellow press," of the concert-hall rather than the music-hall, of the Free Library and Art Gallery more than the public-house. So does, in every respect and particular, the flourishing of the nation as a whole. The place and function of an elementary school particularly include this duty and responsibility to the village, the county, the borough, the State.

Thinking of this after-study, how it can be induced, and with it the flourishing of the things just mentioned, I am conscious of two currents of thought—one towards amplification of the curriculum of the elementary school, and the other towards simplification of it. To amplify the course of study seems, at first sight, the way to ennoble and magnify the school, and make it fertile of after-fruit. But second thoughts demonstrate the contrary. Wisdom tends to simplicity—it is only mere knowledge which makes for complexity. "The deeper the content the simpler the form" is almost a maxim in the arts ; it should be, I think, a maxim in teaching also. In respect of curriculum, the function of the elementary school is to induce a delighted use of the mental tools, more than to teach the subjects upon which the mental tools are to be used. Awaken curiosity, train observation, and induce a love of reading in

children, and we have put them in the true way to be self-educators all their lives.

What is called an "ambitious" curriculum is therefore not in place in an elementary school; the function there, in relation to after-life, is to persuade to learn, not to instruct to know. And what is called a "practical" curriculum is equally misplaced. "Truly educated" is not the same as "highly educated"; it is something far better. There are many vehicles of education, and "all roads lead to Rome," but one need not try to travel by them all. Education consists in spirit and essence, not in lexicons, encyclopaedias, tools, or calculating-machines. "Simplify and intensify the curriculum" is, I think, the true maxim for an elementary school.

Wordsworth, the teachers' poet, himself knew the

"sleepless nights he passed in sounding on
Through words and things, a dim and perilous way";

but it was when knowledge had been assimilated and digested into wisdom that he could write of

"one in whom persuasion and belief
Had ripened into faith, and faith become
A passionate intuition."

Into a place and function which may inspire, aid, and guide towards *that* we must ennoble the elementary school.

SCHOOL ORGANISATION.

INTRODUCTORY.

"The problem of education is the eternal problem of human nature."—MAZZINI.

"Let us grant that, as for every other art, there is also a technique for Pedagogics which can be learned only in a practical way."—WAITZ.

To establish clearly the meaning of the term Organisation, it is desirable to go back etymologically to the original Greek:—the tool or instrument¹ with which work² is performed. Applied biologically, *organ* designates a part performing a given physiological function. Again, as the life of an individual is, in a physiological sense, the sum of its functions, so the aggregate of its organs is called an *organism*. Finally, an artificial organism, in which a variety of members and instruments are disposed in order to secure a desired end, is termed an *organisation*. As often happens, the same abstract term signifies both an *act* and an *effect*, or an act and a state—so in this case organisation covers both the *arranging* and the *arrangement*. The application of this word pedagogically is a wide one. The co-ordination of the schools of a

¹ ὄργανον (Latin, *organum*) = tool or instrument.

² ἔργον = work.

county, town, or district; the division of a school into various departments; the working plans laid down by a head teacher for the effective teaching and proper governance of his scholars—all these come legitimately within the meaning of "school organisation."

It is, however, the last-named phase of organisation that will be principally considered in these pages—the foundations upon which instruction and discipline may and do rest.

(The working plans must necessarily be influenced by the character of the building, especially by the number, size, and distribution of the class-rooms; by the number and quality of the staff; by the age, sex, and attainments of the scholars; by the subjects of instruction and the methods by which they are taught; by the character of the discipline; and, lastly, by the specific aim which the organiser has in view.)

The nucleus of school organisation is sound classification. The fitting of the teacher to the class, the adjustment of the class to the room, the adaptation of the subjects and methods to the scholars, the proper distribution of time, etc., are the additions that assist in making a coherent and unified whole.

The true basis for educational method is the individual; but its application is almost invariably collective—that is, adapted as far as practicable to groups of scholars approximately possessing equal attainments, but necessarily varying in ability and character.

It is manifest that the best organisation is that which, *ceteris paribus*, will produce the maximum of educational effect in a given time. The essential condition precedent to sound organisation is clear and distinct educational aim. The end of education is not the theme of this book, but so far as it affects organisation and the choice of

studies some remarks are permissible; especially as the training of the child, under the teacher's guidance, is largely a question of self-organisation, of self-adjustment in the course of the various stages of development. No person can be said to be educated unless his experiences have been *organised* or carefully noted, sifted, and adjusted for future use.

All true knowledge implies organisation of experience. Practice makes for perfection. If the effect of the third attempt to do a thing is compared with the first, it will be seen under ordinary conditions what a great advance has been made: and this advance is really due to an organisation of the experiences of the individual during the first and second attempts. The mental operation involved in this kind of organisation is implied by Herbart in his "circles of thought," and when expressed in action leads to the formation of habits—the groundwork of character. "All action springs out of the circle of thought."

It is considered that the dominant characteristic of educational aim should be ethical; that it should point to moral training, not by mere words, but through the heart and intellect, through example, through forces that are part of the energies of a child's nature and enter into the very essence of its soul. In the words of Ruskin, let the children get their "breastplate of truth first and every earthly stone will shine in it." A fine character will satisfy all the theories as to the ends of life: a mere intellectual prodigy will satisfy none.

The intellectual side must, of course, have its due share of attention. Its development naturally occupies the major portion of the time devoted to school life: for it is through the proper training of the intellect and will power that moral height and stability are attained. Mental alertness must be encouraged, reasoning power must be trained,

and an intelligent curiosity developed. It is well, too, for the theory of to-day to become the practice of to-morrow. "The value of knowledge culminates in its use."¹

X Physical culture must also have its claims recognised. Rousseau's ideal on this point is a beautiful one, viz. that all parts of the human body, when in motion, should harmonise with each other, like the sounds of a musical chord.

As the school is State-aided and guided by State regulations, and as, too, it is a unit in State organisation, so it must be in touch with public sentiment and be limited by the public purse. Hence a multitude of forces converge upon the school, and streams of influence surround it. If, therefore, the teacher, bound, as he must often find himself, by invisible chains, is not always able to organise on what he considers to be the best lines, he ought not to allow his educational faith to be weakened or his ideals to lose their guiding power; for there is still an immense field for the play of personality and the operation of initiative, both within and beyond the school premises. No school is bounded by its four walls. Discipline in its best form calls for teachers who are students of the endless problem of human nature, particularly of child nature, and bids those associated with the training of infants especially to remember that young children spend most of their lives in fairyland.

As a nation finds it necessary, from time to time, to make new laws and to repeal or modify others, so it is necessary for a school, if it is to preserve its health and vitality, to be sometimes throwing off or modifying old practices and adding new ones. Change is a law of nature. Change must also, in a modified sense, be part of the practice of the school. It is impossible for any institution

¹ De Garmo.

to thrive permanently unless new ideas are occasionally given play in its constitution. New conditions must arise with the advance of time. Stagnation is death. *Non progredi est regredi*. Knowledge is "a world whose margin fades for ever and for ever as we move." Conformity to the law of progress is imperative.

Change, however, must not be introduced for the sake of change. When introduced it should be like the change of an organic body, "not that of a cloud." Before anything is discarded or anything added, mature consideration should lead the way.

The assistant teacher's interest in the school ought not to be limited to his class. His horizon, theoretically at least, should be as wide and extended as that of his chief. Everything that concerns the school as a whole should excite his interest and bring his help if desired. Loyal co-operation with the head teacher and devotion to his scholars are the sum of his duties.

On the other hand, the wise head teacher extends a tactful consideration to each member of the staff, and remembers that all are not to be influenced and directed by the same means. He bears in mind, too, that it is mainly through the agency of the class teacher that each individual is reached, and the law of the school upheld.

The empirical character of much of the following dissertation will be manifest. In many respects, when dealing with the social sciences (and in pedagogy, perhaps, no less than any other), experience is the chief guide. The variety of circumstances, the variation of character and the difference of local aims, are so great as to render a purely scientific treatment an impossibility within the limits of a small volume. However, a good school possesses the same essential features wherever found. "It always nourishes the same interests; it always leads to thinking as well as

observation ; it always points to the beautiful in the world and to the sublime above it ; it always awakens sympathetic participation for domestic and civil weal and woe."¹

This quotation indicates the character of the work to be accomplished. It is clear that a sound organised basis is essential. Personal enthusiasm, an insight into child nature, a knowledge of the procedure adopted by the best educationists and of the principles underlying this procedure will probably be the teacher's most suitable outfit.

¹ Herbart.

CHAPTER I.

"The excellence of every art must consist in the complete accomplishment of its purpose,"

THE PREMISES, FITTINGS, FURNITURE, ETC., IN RELATION TO ORGANISATION AND SCHOOL HYGIENE.

THE PREMISES IN GENERAL.

Educational Effect of Good Premises.—Suitable rules for the planning and equipment of schools have been drawn up by the Board of Education for the guidance of local authorities. These rules represent a minimum of requirements, and apply to all new buildings unless it is made clear that exceptions should be allowed.

The educational effect of good premises is undoubted. A simple, dignified, and, if possible, artistic exterior, suggestive of the purpose for which the building exists, is calculated, apart from other considerations, to make the scholars proud of their connection with the school, and to exercise a constant and impressive influence in the neighbourhood concerning the ideals of education.

A really artistic school building—and it can be artistic in simplicity—radiates its beauty day and night. It is a permanent expression of spiritual things; it is sculptured stone and masonry embodying a great aim; it is a silent

power for good to all who look upon it, or dwell within the spell of its presence. In poor and squalid neighbourhoods especially such a building exercises a continuously wholesome influence. One might properly say to the local authority, "Costly thy *buildings* as thy purse can buy, but not expressed in fancy."

X It is an architectural canon that the exterior of a building should suggest the character of the interior; and the interior should of course be planned for, and adapted to, the work it is proposed to do therein. First and foremost the building must be planned in conformity with hygienic laws. The child's extreme susceptibility to injury from a noxious environment demands that this shall be the primary consideration. The building should be so situated that the sun can reach all its class-rooms without filtering through foliage or being obstructed by house-tops, that the air may be able freely to play round it, and that the natural drainage can be effected without saturating the sub-soil with moisture. It is well, too, to have the building remote from factories and offensive odours, and standing back some distance from the main arteries of traffic, so that the work may not be disturbed by external sounds.

There should be a commodious playground, evenly warmed and well lighted rooms, and a thorough system of ventilation. Other considerations are the number of entrances and exits, a sufficiency of cloak-room accommodation, the number and distribution of class-rooms, facilities for adequate supervision and for the speedy passage of the pupils from one part of the building to another.

It is evident that the interior of a building will, if suitably planned, give material aid to the work of organisation, and assist in many ways to produce the best educational results. Pupils cannot be expected to work and develop in accord with their natural tendencies and abilities unless

good light, fresh air, change of position and of exercise, daily and hourly companion their studies. Without a healthy environment and facilities for free development, there is a tendency for the intellectual forces to wane and for the moral power to deteriorate.

General Plan of Building for an Ordinary Graded School.—From the nature of the work to be accomplished and the number of children that must be duly classified and instructed, it is clearly desirable that a building proposed as a school-house should be specially designed for that purpose and that purpose only. Too often in the past educational claims have been subordinated to other considerations. It is undesirable, however, to have a rigidly uniform standard in school buildings, since education should be progressive, and changes in method and procedure demand the construction and alteration of buildings in conformity with those changes. The character of the building too must, to some extent, be determined by the number of children it is intended to accommodate and by the special aim involved in their training. As there is no finality in method, so there can be no finality in the standard of school buildings.

The best type of building, so far as the interior is concerned, is one with a hall having the class-rooms grouped near it, each room also having its independent entrance; and this type is the more advantageous when both hall and class-rooms are on the ground floor. It is not always practicable, where space has to be strictly economised, to prevent some class-rooms from opening into the hall; but when this can be avoided, it should, for two reasons:—(1) cross ventilation is desirable, and this cannot be secured, as a rule, without using the hall for purposes of that ventilation; and (2) the sounds proceeding from the hall when

games and other exercises are in progress there—and this should be often—are likely to disturb the studies in the adjoining rooms.

As far as possible, the class-rooms should open into corridors ten feet wide, situated at one end, or at opposite ends, of the hall. This type of building is found in New York, where it assumes the shape of the capital letter H. In London the ground plan in recent buildings assumes the form of a quadrilateral figure. Most of the class-rooms open into corridors; but two rooms usually open into the hall, and this necessitates the use of the hall for cross ventilation. Again, in Fig. 16, showing the plan of an American school, the same kind of connection exists between class-rooms and the larger space for general assembly, though in this case some provision is made for good ventilation (diagonal mostly) without necessarily using the hall for that purpose.

Some American educationists maintain that all school buildings should be confined to the ground floor, and that the illumination of the rooms should come from above, as designed by nature, the eye being naturally adjusted to such light. Through milk-white translucent glass the light should be flooded into the rooms by ceiling areas sufficiently large and well distributed to reach equally every portion of the interior, without the possibility of shadow.¹ There should be no side windows for illuminating purposes; but on the side opening into corridors

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¹ "Skylights are objectionable. They cannot be approved in school-rooms or class-rooms. They will only be allowed in central halls having ridge or apex ventilation."—*Board of Education's Building Regulations*.

windows should be placed, overlooking the school garden. They further maintain that ventilation should be effected through "walls that breathe," as in Dr. Richardson's *Hygeia*.¹ It is claimed, under this system, that ventilation difficulties would vanish, and that other great problems in connection with school buildings would be solved.

The *best type* of building already referred to is only regarded as such with certain qualifications. Something must depend on (1) the size of the hall in relation to the number of scholars, (2) whether there are other rooms besides the ordinary class-rooms in which work of an essentially practical nature can be efficiently carried out, and (3) whether the building is used as a self-contained department.

A hall measuring 40 ft. by 50 ft. would reasonably accommodate 500 scholars.² The number of children for whom provision must be made should generally be the determining factor in deciding whether a school-house shall have a hall or not. The hall is so useful an adjunct to the work of the class-room that, on purely educational grounds, it must be regarded as essential to every school building, unless by some mechanical device class-rooms can be converted into a quasi-hall for temporary purposes, or unless one of the rooms is commodious enough to accommodate all the scholars of the school at one time; but even conveniences like these only confer one of the many benefits which a permanent and spacious assembly-room is able to give to the life of a school.

¹ See *An Ideal School*, by Prof. Search, pp. 88-90.

² *Halls*—not more than 4 sq. ft. of floor space for each scholar is recognised. "About 3½ sq. ft. for each scholar will be sufficient."—*Board of Education's Building Regulations*. "For large departments containing from 350 to 600 places, the most suitable plan is that of a central hall with the class-rooms grouped round it."—*Ibid*.

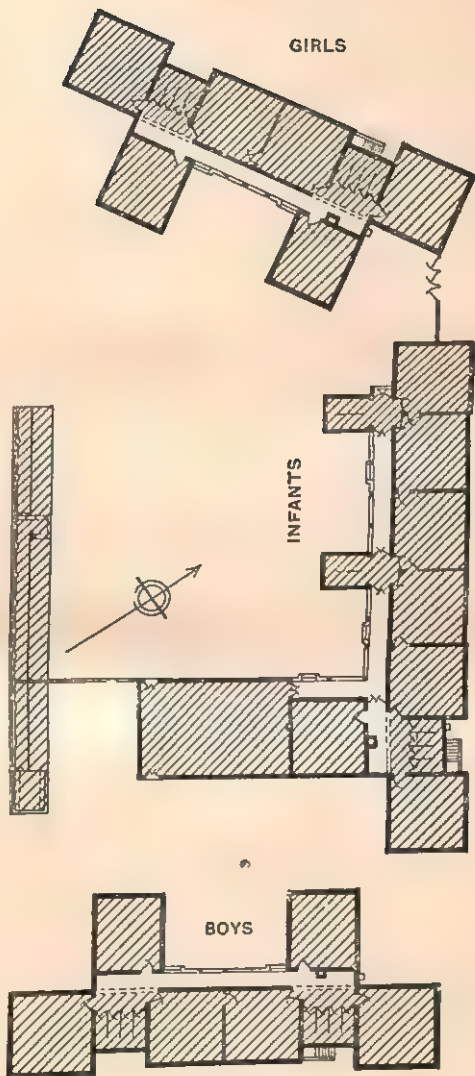
In many large towns the cost of sites has compelled local authorities to erect three-storey buildings, the infants occupying the ground floor and the senior boys and girls the floors above. But many of these "three-deckers" have a central hall in connection with each department, especially when the accommodation of the whole school covers a thousand or more places.

Medical testimony now strongly supports the construction of buildings not more than two storeys high; for the effort required to ascend many flights of stairs, in marching order, four or five times a day, must severely tax the energies of the delicate child. When the site is sufficiently large and open, and also fairly level, the most economical plan is that in which all the rooms are on the ground floor; and this arrangement is preferable on educational grounds. It is desirable that a building for use as a public elementary school should be on not more than two floors. "A building on three floors is open to many objections, though it may be necessary in special circumstances."¹

Small schools will meet official requirements if the plans arrange for the class-rooms to open from a corridor, or if there is "a schoolroom with one or more class-rooms"; one class-room is imperative "except in special cases," and the schoolroom in this case should "never be designed for more than 100 children."

In this connection it is well to note an experiment now in operation in Staffordshire, taking the form of what is called "Pavilion Schools." In these buildings there is no *central* hall, mainly because of ventilation difficulties. All the class-rooms are on the ground floor, and the *one* hall, adjoining the infants' school, serves for the use of all departments. The class-rooms are designed in pavilion

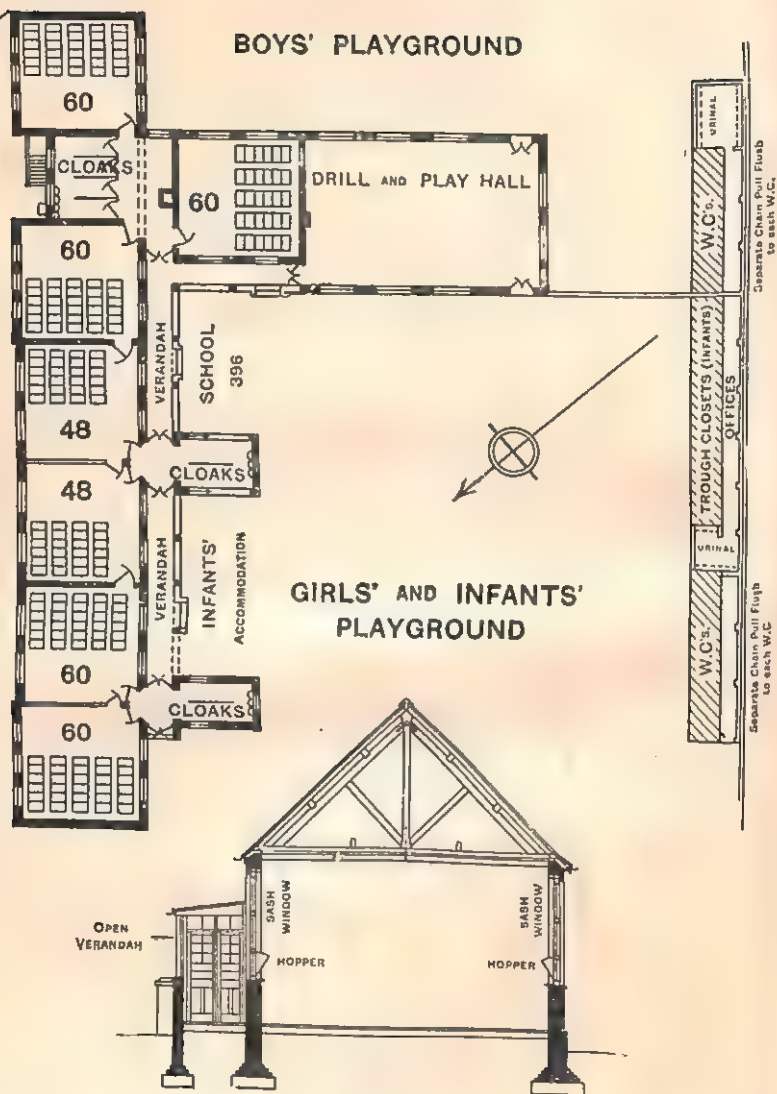
¹ Board of Education's Building Regulations.



Ground Plan of School.

Fig. 2.

THE STAFFORDSHIRE TYPE OF ELEMENTARY SCHOOL.
GROUND PLAN SHOWING RELATIVE ARRANGEMENT OF THE THREE DEPARTMENTS.



SECTION.

Fig. 3.

THE STAFFORDSHIRE TYPE OF ELEMENTARY SCHOOL. GROUND PLAN OF INFANTS' SCHOOL, WITH DRILL AND PLAY HALL. ALSO SECTION OF CLASS-ROOM.

form communicating directly with a verandah which, in the case of the infants' department, leads directly into the hall in question. The promoters of this experiment claim that (1) the pavilion type of building marks from the hygienic standpoint a distinct advance in school architecture, ample provision being made for cross ventilation by both hopper and sash openings of the windows, (2) it costs one-third less than buildings of the central hall type, and (3) it is at least as conducive to educational efficiency.¹

The first two claims are justified: the third, however, is extremely doubtful.

The principal factors for consideration in determining the type of building for an ordinary elementary school are (1) the number of children to be accommodated, (2) the distribution of these children, having regard to both sex and age, (3) whether provision is to be made for children under five years of age or not, (4) the correlation of the work of the school with other institutions (if any) in the locality, (5) the need for compactness to secure a smoothly working organisation and supervision, and (6) the two official limitations,² viz. (a) each department must have its own head teacher, and (b) no department must contain more than 600 places.

The Small School.—There are cases in which a single school-room or small hall becomes a necessity. In many sparsely populated districts there are village schools with twenty to fifty pupils representing probably almost as many grades of attainments as are to be found in much larger urban districts. Small schools like these are generally organised and taught by one certificated teacher. It is, therefore, a practical necessity of the situation to have

¹ See Lyster's *School Hygiene*.

² Board of Education's Building Regulations.

all the pupils in one room, so that while the teacher is giving oral instruction to one section he may have the remainder of the scholars under supervision. In cases of this kind a separate class-room would be next to useless unless it accommodated the whole of the scholars. It would then be useful for purposes of practical work, or of change and fresh air. A single-roomed school should not exceed 600 square feet in floor space.¹

A convenient form of building where two or three teachers (including the head) are on the staff is one with a corridor 15 or 16 feet wide, the class-rooms, cloak-room, and lavatory opening into it. Such a corridor, if the floor is wood-blocked, serves for physical exercises in inclement weather and many other purposes for which a hall is generally used.

The Hall.—The hall is common ground for all the classes. If used as an ordinary class-room, permanently or temporarily, such use throws a great burden on the teachers, subtracts from the efficiency of the work, and seriously interferes with the purposes for which a hall is primarily intended. The hall should, of course, be sufficiently large to accommodate all the children in the department of which it forms a part, and be as well warmed, lighted, and ventilated as the other parts of the building.

It occasionally happens that a hall has to serve for the joint use of two or more departments. The Board of Education raise no objection to this provided it is reasonably accessible to all the scholars. Sometimes this joint use causes much inconvenience to the department the class-rooms of which open directly into the hall. Besides the general advantages that a hall confers, it is particularly useful for physical training in the winter months, and at

¹ See Board of Education's Building Regulations.

all other periods of the year when open air space is not conveniently available. The hall must not, as a rule, be included in the accommodation, except as a temporary measure, and then only by special sanction of the Board of Education.

The Class-rooms.—The number of class-rooms must be determined to a great extent by the accommodation of the department. Generally one room for every fifty scholars is regarded as a fairly satisfactory arrangement.¹ No class-room should accommodate less than thirty pupils on the ten square feet basis. The Board of Education Regulations, which have to be framed to meet every variety of circumstance, limit the size of a class-room to one accommodating sixty children, "but in special cases somewhat larger rooms may be approved." It is not always desirable to have all the rooms of the same size, since the lower classes are generally the largest and the highest class is often very large at the beginning of the year and small towards its close.

In a department accommodating 352 children a suitable distribution would be found in eight class-rooms with the following accommodations—40, 40, 40, 40, 48, 48, 48, 48; or, better still, an accommodation of 368 might well be represented by nine rooms—2 (36), 5 (40), 2 (48). A well-balanced school of three departments—boys', girls', and infants'—would be represented by the respective accommodations of 352, 352, 380, supposing children under five years of age are admitted.

Class-rooms that must be used as a means of reaching any other part of the building, public thoroughfare, or playground—"passage rooms," as they are called—are not

¹ For new buildings in the County of London, 40 is the maximum limit for the senior departments and 48 for infants.

satisfactory, as interruption of work and strain on the teacher's powers, especially his patience, are involved. It is important, when class-rooms are separated by movable partitions, that the separation should be reasonably complete as regards both sight and sound. It is often found convenient in emergency and other cases to be able to convert two class-rooms into one. A room that accommodates seventy children, for example, which is too large for one teacher, could be suitably divided into two parts of thirty and forty for the use of the upper standards, and be re-converted into its original size as occasion requires.

(1) *Movable Partitions*.—In some of the older school buildings, containing only one or two large rooms, collapsible partitions of a substantial kind, glazed in their upper parts in order not to intercept light, have been found a means of creating or increasing class-room accommodation, while still retaining the advantage of being able to restore the rooms to their original sizes when desired. This kind of partition effects a complete separation from floor to ceiling, and is easily folded like a drawing-room screen, its support strains being chiefly borne by the lateral walls to which it is permanently attached. By these means a hall becomes converted into two, three, or more class-rooms according to the number of partitions, and can still be used as a hall for assembly, dismissal, and other purposes. This arrangement, however, has its disadvantages, often in the resultant ill-shaped class-rooms, the absence of independent entrances and exits, and the frailty of the material, which permits the passage of sounds from one room to another; but the gain, nevertheless, is considerable.

(2) *Curtains, etc.*—The use of curtains to separate one part of a room from another has advantages; they should not, however, be used when other and better means of isolation are possible, and should always be regarded as a

temporary expedient. Curtains are, perhaps, less objectionable when made of washing material; but they almost invariably obstruct the light and do very little towards deadening the sound. Dwarf portable screens of wood and cathedral glass are sometimes used instead of curtains. When curtains are deemed necessary, they should be thoroughly shaken or cleansed weekly.

Class-rooms of the same superficial area and of equal height are not necessarily suitable for the same number of children. The kind of desks and the possibilities of arranging them satisfactorily in regard to the light, the position of the doors, radiators or fireplaces, the shape of the room, etc., are factors for consideration in determining the accommodation. As to shape, the Board of Education¹ express approval of a room approximating to that of a square: but this can scarcely be considered the best standard.

(3) *The Extra Room.*—Besides the desirability of having a marginal accommodation for each room of a department, there is need for an occasional or extra room, which should not, as a rule, be included in the official accommodation: or, if included, it should only be recognised for 20 or 25 places, though on the 10 sq. ft. basis it might accommodate at least 50 or 60 children. Such a room could be put to a variety of uses, all pointing in the direction of increased efficiency. It might, too, assume many forms according to local needs. It might, for example, be utilised as an ungraded room either permanently or intermittently. If permanently, the room might be a comparatively small one; if intermittently, it should be of sufficient size to accommodate any of the ordinary classes. Generally a commodious

¹ "The proportions of class-rooms should vary with the kind and arrangement of the desks; but a long and narrow room should always be avoided, and a room approximating to a square is the most satisfactory."—*Board of Education's Building Regulations.*

room of this type is best, since it could then be utilised for a variety of purposes as occasion requires.

Again, a demonstration room is most useful—especially for the science work of the upper classes or the object-lessons of the lower ones, and for lantern lessons generally. A room of this kind is usually fitted with a well-equipped demonstration table or bench; a double vertically sliding blackboard, the framework of which is fixed to the wall nearest the table and facing the class; and also with flooring so terraced that each row of desks rises above the one in front of it, giving every scholar an easy and uninterrupted view of any experiment that is being performed. It is not uncommon to have a smooth white surface of cement behind the sliding blackboard, to take lantern pictures. The Board of Education will not, however, approve of a special lecture-room of this kind, outside the accommodation, in any *ordinary* public elementary school. Apart from the visual facilities which a room of this kind confers, the opportunity for occasional change that it affords is one that promotes both bodily health and mental alertness.

With certain exceptions, every class-room should be stepped. Usually three flights of stepping are deemed sufficient—the three back rows of desks then assuming terrace form.

(4) *Rooms for Art Instruction and Practical Work generally.*—There is in educational circles a growing demand for specially designed and equipped rooms, suitable for general practical work and instruction in drawing. It is recognised, however, that some practical work is already done in the class-room, though more could well be carried out there.

Nevertheless, there are some kinds of experimental work that need a wider field for scholars than the ordinary

class-room can give and a more intimate supervision on the part of the teacher—work of a systematised nature calculated to train the child in habits of close observation, reasoning from that observation, and recording his impressions in fairly exact language. Theory can only be vitalised by practice. Every step in the educative process is imperfect, unless the cycle of observation, thinking, and expression or application is made complete within a reasonable time. The claim for at least *one* practical work-room may be justified on the following grounds:—

(a) School education is intended to train the child for complete living. Life is essentially practical. The work of the school should therefore approximately correspond to the character of the activities external to it.

(b) The adjustment of the hand and the due co-ordination of other parts of the body, to carry out the behests of the mind in experimental work, is a branch of physical culture; and this applies equally to the co-ordination of hand and eye in drawing. Physical training apart from mental must be defective that does not include this type of individual application—group exercises, games, and contests being assumed.

(c) The cycle involved in every phase of the educative process cannot be complete without proper facilities for practical work.

(d) The moral influence that naturally flows from serious independent effort directed to ends either immediate or remote is a most important element in the creation of will power and therefore in the formation of character.

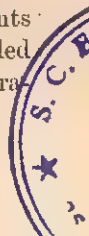
(e) The need for occasional change of immediate environment, and of emancipation from the sedentary restraints of the ordinary class-room by which circulation is retarded and the vital processes to some extent arrested, is imperative if free development is to be secured.

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(f) The change from the class-room to the fresher air and freer atmosphere of the practical work-room energises both body and mind, and gives rest to the tissues fatigued by sedentary positions. Change is eminently desirable when fatigue is local and not also general.

Of course economic claims must put some limit to these special rooms. When therefore it is not possible to provide both a practical work-room *and* an art room—the hall, if there is one, might well take the place of the latter, if satisfactorily lighted—one commodious room could be made to serve the double purpose by fitting collapsible ledges to the walls and by utilising for practical work, when necessary, the adjustable desks usually supplied to art rooms.

It is assumed that manual training involving the use of wood would, in existing centres as in the past, be confined to the upper classes of boys' departments. For boys aged eight to eleven, manual work involving the use of paper, cardboard, and stripwood, clay modelling or modelling in plasticene seems admirably fitted. Much of this manual work is also suitable for girls: and it would correlate excellently with History, Nature Study, Geography, Arithmetic, Geometry and Drawing.

Making the above assumptions as to the nature of the work to be attempted, and keeping also in view the necessity for teaching arithmetic and other subjects as practically as possible, a room of dimensions approximately 30' \times 24', supplied on three sides at least with a flat desk running around the walls at a height of 3 feet from the floor, would prove most useful. Narrow tables, or benches not fixed to the floor, could occupy the middle of the room when art desks are not present. A supply of stools would be necessary, as the pupils would occasionally be seated for drawing (not art), and also during talks on theory by the teacher.

Such a room could also be used by girls for needlework and cutting out, and some of the other subjects of instruction.

General equipment should follow and conform to the gradual organisation of the work, especially if it is proposed to make such a room a centre for two or three schools.

It is not intended that this practical work-room should necessarily be used, to the exclusion of the ordinary class-room, for work of the manual training type. It is rather intended as a room to supplement, in a specialised form, the manual work that can, under existing conditions, be carried out in the class-room, especially among the lower classes.

(5) *Infant Rooms*.—All rooms for infants must be on the ground floor, the means of access to which should, as a rule, be independent of those for the senior children. In village areas, however, where it is not uncommon to find infant classes in the same department with the older scholars, separate entrances are not always practicable.

A hall or some other free space for marching and games is essential to an infant department or infant classes. There is a division of opinion among teachers and others as to the value, for the youngest children in infant departments, of flat floors on the one hand, and stepped flooring on the other. It used to be a general practice to provide galleries for the babies: but these terraced masses of woodwork are doomed to extinction. In some areas they are gradually being removed in favour of flat floors and miniature tables and chairs. The gallery, though useful in many ways, especially if so arranged that the teacher can easily get behind each child, is yet open to many objections, among which are the following:—

(a) It occupies a large space in the room which is needed for the free circulation of air.

(b) Dust and organic matter pass through the spaces between the boards and accumulate below, where the air is almost stagnant and necessarily impregnated with gases injurious to health.

(c) The high stepping causes some children to stumble occasionally and to injure themselves.

These objections more than outweigh all the advantages that could be possibly cited in the gallery's favour.

In order to economise space the seats or kindergarten desks are placed close to the walls on three sides of some babies' rooms, and thus most of the floor space is available for exercises and games. In this case all the floor space is flat. There seems to be little doubt that the level floor is most suitable for children up to five years of age.

Again, it has been advocated that the best relative positions for teacher and taught are for the former to be on a slightly raised platform and the latter on the level floor. This arrangement is objectionable, since it causes the children to raise their eyes above the horizontal, and this throws a strain on the levator muscle which it is not well adapted to bear.¹

When practicable, a nature-study room for the infants is very desirable. If this is not possible, inside ledges to the windows, whereon seeds and plants may be developed, are a fairly good substitute. Each class-room, indeed, ought to be a miniature nature-study room in itself.

A suitable height for a class-room is 14 ft. Any height over that is considered waste, since it serves no useful purpose.

(6) *Accommodation of Rooms.*—A large number of schools still have their accommodation reckoned on the 9 sq. ft. basis, *i.e.* the superficial area necessary for each

¹ See Report of the Medical Officer of the late School Board for London for the year ended March 1904.

child. In all new schools the Board of Education are demanding a 10 sq. ft. basis for ordinary senior departments and a 9 sq. ft. for infants. This basis is by no means ideal. Growing children, and especially infants, require more fresh air even than adults. To keep the air pure at all periods of the year, under existing official conditions, and under too some of the best systems of ventilation, has been found practically impossible. It is therefore most desirable to raise the accommodation basis. Halls and special rooms for cookery, laundry, housewifery, manual training, science and drawing, must not be included in the official accommodation of the school.

Premises for Special Purposes.—Some additional points concerning premises other than those of the ordinary school:—

(1) *The Higher Elementary School.*¹—The principles governing the plans of ordinary schools should have a general application to those of higher elementary and other similar schools. The special aim of every proposed school of this type should be definitely settled before the building is designed. For a higher elementary school accommodating from 300 to 350 scholars, eight to ten class-rooms will generally be required, since every class should have its own room, and no room should accommodate more than forty scholars.

The class-rooms may be furnished with single or dual desks. If single desks are adopted, a class-room should have an area of about fifteen square feet per scholar. Class-rooms fitted with dual desks need not be so large, but a minimum of about twelve square feet per scholar will be requisite.

¹ See Board of Education's *Rules for the planning and fitting up of Public Elementary Schools*.

Special rooms, other than ordinary class-rooms, must, as a rule, be provided: their nature will naturally depend on the general method to be applied and the curriculum adopted—they must, in any case, be reasonably commodious and suitably equipped. If a laboratory is provided or drawing taught, then the rooms sanctioned for these purposes should afford thirty square feet of floor space for each scholar in accordance with the accommodation. If suitably lighted, however, the hall might suffice for drawing purposes.

(2) *The Central School.*¹—On all material points the buildings erected for this purpose correspond to those built for higher elementary and certain higher grade schools. The class-rooms are, for example, designed for not more than forty scholars, and special rooms are provided for drawing and general practical work. A hall that will accommodate the whole of the pupils at one time is included.

Rooms for Cookery, Manual Instruction, etc.—

As a rule a single room each for cookery, laundry-work, manual instruction, science, or drawing, will serve for more than one school if provided as a centre in a convenient position. Every such centre should have its own lavatory and cloak-room.

Large schools, or schools of an exceptional type, such as a higher elementary school, may sometimes require special rooms for their exclusive use.

Cookery.—A cookery room should be capable of accommodating from twelve to eighteen scholars engaged in practical work. Provision for instruction in scullery work is also necessary.

The sink should be placed in full view of the teacher

¹ Recently established by the L.C.C.

and pupils, and should be fitted with a cold water supply and a waste pipe.

The floor space for practical work should afford about 25 square feet for each scholar, and should not be encumbered with desks, cupboards, or stoves.

In cookery rooms the ventilation needs special arrangements. Where a gas stove is used, it may be necessary to have a pipe fixed to carry off noxious fumes. The temperature should not be allowed to rise above seventy degrees.

The apparatus for lessons in cookery should include such stoves and other appliances as are usually found in the homes of the scholars, and are sufficient to meet their needs in actual practice. Indeed all fixtures and other appliances should be so arranged that every pupil may receive the full benefit of the instruction given.

Laundry.—A laundry should be of simple construction, and entirely apart from the ordinary school buildings. On the accommodation basis it should provide at least 25 square feet of space for every pupil.

The benches or tables should be large enough to allow at least three feet of space for each child when ironing.

In the ventilation of the rooms special arrangements should be made for the removal of steam.

Housewifery.—A housewifery centre¹ usually consists of an ordinary five- or six-roomed cottage such as the ordinary parent of a child attending an elementary school would occupy. It is, therefore, furnished simply and comfortably, and with such household appliances as are deemed necessary to efficient domestic management.

Manual Instruction for Boys.—"In its plan, arrangements, construction, lighting, and ventilation, a manual

¹ The Board of Education has not, up to the present, laid down rules for the planning and fitting up of housewifery centres.

instruction room should be modelled on a workshop rather than on a school. The construction should accordingly be simple. The roof may be either of lean-to or other ordinary form, according to circumstances. Its height at the windows in front of the benches need not be more than ten feet. The light must be ample. The temperature should not be so high as in an ordinary class-room. A flat ceiling is not, as a rule, necessary. Ample ventilation should be provided by inlets at a height of five feet from the floor, and by outlets at the highest point. A manual instruction room for twenty scholars should have a floor space of about 700 square feet."¹

Science or Practical Work Room.—A room suitably fitted for elementary practical work in science may be provided for the use of one large or several contributory schools. Such a science room should not, as a rule, contain more than 600 square feet of floor space. It should be fitted with plain strong tables, sinks, cupboards, shelves, and where necessary, a fume closet. A proper supply of gas is necessary.

In addition to a science room, one of the ordinary class-rooms may be fitted with a simple demonstration-table and gas and water supply. But a special lecture-room cannot be approved in an ordinary public elementary school.

Art Rooms.—"A drawing class-room can only be sanctioned where it is likely to be used for a reasonable time every week by the scholars from one large or several contributory schools. A suitable size for such a room is 600 square feet of floor space. Light should be admitted at a suitable height and angle from the north, north-east or east."² Generally a drawing class-room's accommodation should not exceed twenty-five.

¹ Board of Education Regulations. ² Ibid.

Rooms for Defective Children.—N.B. These rules must be read in conjunction with the general rules for the planning and fitting up of public elementary schools. Each building designed for defective children should be "structurally separated" from that approved for each type of defective child.

Day Schools or Classes for Defective Children.—

- (a) Each class-room must provide 18 square feet per child for physically defective children. In all other defective cases, 15 square feet at least should be the basis of accommodation. The minimum floor space of any class-room might vary from 300 to 360 square feet, the latter being the minimum for *physically* defectives. It is desirable that all rooms should be furnished and equipped for occupations or manual instruction.
- (b) All playgrounds, offices, cloakrooms, lavatories, entrances, and passages must be so constructed as to admit of easy supervision by the teacher of the school, and must, as a rule, be kept for the sole use of the children attending that school.
- (c) All rooms for *physically* defective children must be on the ground floor.
- (d) Where the premises are intended for the use of more than one class, they must, as a rule, include a wide and well-lighted corridor or hall, which can be used for drill and assembly.
- (e) Each child must, as a rule, be provided with a single desk of suitable size, and sloped at an angle, except in schools for the blind, of from ten to fifteen degrees.

(f) The playgrounds must have an area of not less than thirty square feet per child and should be separate for boys and girls.

(g) There should be a room for the use of the teacher and for the medical examination of children.

It is perhaps needless to say that the general principle applied in the construction of all special premises and in the supply of furniture and equipment is that they shall completely fulfil the purpose of their existence.

The Playground.—There are many schools without playgrounds.

The Board of Education now wisely demand that every newly planned school shall have an "open airy playground," proportioned to its size and needs. All playgrounds should have a sunny aspect, approximate to the square in form, be enclosed, levelled and drained, and be as far as possible free from dangerous corners and buttresses: a part should be covered in so as to afford protection from rain. An infants' playground must always be on the same level as the school and have a sunny aspect.

Roof playgrounds for senior boys or girls are found here and there in large urban centres. Where suitable play-spaces exist organised effort is fairly generally made to keep the children from the streets and to interest them in games supervised by teachers and voluntary workers. Berlin and Charlottenburg,¹ for example, organise games in the summer months, at least twice a week from 4 to 6 p.m., in play and recreation grounds. An experiment, too, in providing a course of games during the summer holidays, under various superintendents, has proved ex-

¹ See Report of Mr. G. Andrew to the Scotch Education Department, 1904.

ceedingly popular—an occasional excursion to places of interest giving to these courses an added charm. Winter, too, has not been left without its organised recreation; for parts of the recreation grounds have been converted into skating rinks, upon which the children, boys at one time and girls at another, have been able to disport themselves.

Similar private effort is in operation in London—perhaps on a more extended scale—and other large towns, the object being at stated times and at particular centres to teach the children the ideals of play under able superintendents, and further to demonstrate to the older children how fascinating work can become when *interest* prompts and sustains it. As an arena for moral training the playground has few rivals, for there the social instinct is dominant and ready to put forward those fine qualities associated with it in its best form. Cheerfulness, resource, prudence, justice, sacrifice, delight in the pleasure of others, and the satisfaction that activity gives are taught, cultivated, or strengthened by play under proper conditions.

Indeed, the playground affords one of the best opportunities for the teacher to study the characters of scholars. His presence there is essential at all reasonable times. Knowledge is always power, and the kind of knowledge that can be acquired in this way is the key to sound progress and the moral betterment of every scholar in the school. Good and bad traits of character exhibited in the playground the teacher can utilise as an object-lesson in the class-room later, and especially employ them to illustrate the weekly hall address. Of course, all such references should be impersonal.

Play is instinctive, and nature intends it to serve useful ends. For very young children it is the most important of all means of learning. It is indeed the chief agency in

development at this period of life; it is the resultant of forces that infants are powerless to resist. The sum of a teacher's efforts as revealed by effects in the process of education is almost infinitesimal compared with the knowledge a child acquires through the instruction of nature's teachers, play and necessity.

With infants, therefore, up to about five years of age, the playground should be, in spirit, the school, and the class-room the accessory. Rapid growth and development, until seven summers have passed, demand a freedom of movement and excite a desire for activity, to which the child naturally craves to respond. The variety of employment that play gives is doubtless one of the best responses to nature's call.

In summer and on other favourable occasions, therefore, every opportunity should be seized to utilise the infants' playground for games and other kindergarden instruction. In the words of Pestalozzi, "Neither book nor any product of human skill, but life itself, yields the basis for all education." Again, "Dumb yearnings, hidden appetites are ours; and they must have their food. Come into the light of things, let Nature be your teacher."¹

"The essential things in education are intellectual interest, freshness of teaching, human sympathy, devotion to high aims. These are spiritual things, and the spirit, like the wind, bloweth where it listeth."²

The teacher ought, therefore, to enter upon his work with the spirit of an artist,—led, as it were, by that spirit into the schoolroom (which might often be under the open sky), where, with the aid of discipline framed on wisdom's firm lines, but softened by sympathy and tempered by genial moral warmth, he will endeavour to

¹ Wordsworth.

² Mr. Michael E. Sadler, *Special Reports*, Vol. 9.

mould or train into the fullest life the plastic material committed to his keeping.

SCHOOL HYGIENE.

Matters already discussed in this chapter have of course a bearing on school hygiene, but the following have a special reference to this subject.

From the purely health point of view, serious attention should be given to three points in selecting a school site: (1) *natural drainage*—including the general level of the ground water; (2) the *nature of the soil*—a dry soil is essential; and (3) *position*, i.e. aspect, elevation, and immediate surroundings.

A south or south-west aspect is desirable. This usually ensures a plentiful supply of sunlight, and possibly shelter from north and east winds. It is important that every class-room should receive, at some time during the day, the direct rays of the sun.

It is perhaps unnecessary to say that the teacher should be acquainted with some of the essential principles that underlie the construction of school buildings. The nature of his office demands this knowledge. Faults of construction, any defect likely to impair the efficiency of the school work or to jeopardise the health of scholars are matters that directly concern him. Some Education Authorities, too, wisely concede the need of submitting plans to head teachers when new buildings are to be erected, or old ones remodelled.

Next to the site, the first consideration naturally belongs to the *foundation*. This should always be of virgin earth, and covered with a layer of concrete extending several inches beyond the footings of the external walls. Immediately beneath these walls the concrete should be much

deeper than elsewhere, the depth being proportional to the weight of wall it has to support. Without this layer of concrete, the moisture and ground air in the soil below would find a passage into the building, with probably disastrous results to the scholars.

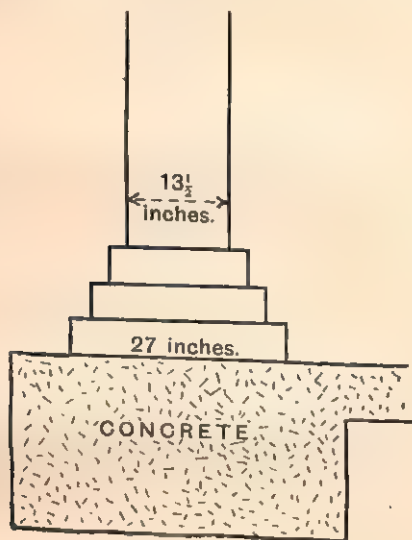


Fig. 4.

FOOTINGS OF WALL AND CONCRETE FOUNDATION.

"All walls, not excepting fence walls, should have a damp-proof course just above the ground line."¹ Air-bricks should be inserted in opposite walls to ensure a constant current of air under floors for the ventilation of joists;² and the damp-proof course should extend from at

¹ Board of Education's Building Regulations.

² Or the building might be erected on arches of solid masonry as suggested by Dr. Richardson in his *Hygeia*,

least 6 in. above the ground to a depth below the level of any timber forming part of the building. The damp-proof course serves a double purpose: it ventilates and keeps dry the spaces beneath the floors and prevents the moisture ascending the walls by the operation of the law of capillary attraction. Bricks unless glazed have a great capacity for moisture. If therefore the glazed brick or glazed stoneware is not inserted as in Fig. 5, the bricks nearest the ground will transmit the moisture collected from the soil to those immediately above, and thus the whole of the walls would become damp and dangerous to health.

Floors and Roofs.—Wood-blocks, laid upon concrete, should be used for the ground floor. Indeed they are best for all floors, as they reduce noise to a minimum¹ and do not encourage the accumulation of dust and dirt. The ordinary plank floor, after shrinkage has set in, admits into the spaces between the boards all kinds of dirt and organic matter which cannot fail to pollute the atmosphere of the school-room. Rectangular corners and sharp edges should be avoided, for both concave and convex surfaces facilitate thoroughness in cleansing. At the point where the floor joins the wall, for example, a rounded insertion should be made. It has become usual, in recent buildings, to substitute coloured glazed bricks for the old wooden wainscoting now condemned as insanitary.

Although the subject of roofs may seem somewhat remote from the teacher's work, their nature may nevertheless be of great importance to him. If not properly constructed, teachers and scholars occupying the top floor will suffer from cold in winter and the burden of an intolerable heat in summer. Roofs should therefore be

¹ "Especial care must be taken to render the floors, as far as possible, sound-proof."—*Board of Education's Regulations.*

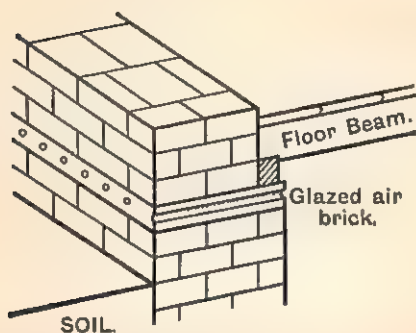


Fig. 5.

DAMP COURSE OF PERFORATED GLAZED AIR BRICKS.

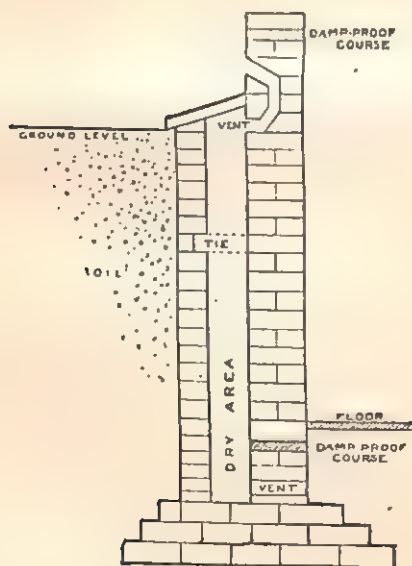


Fig. 6.

constructed to prevent extremes of heat and cold. Slates laid on laths do not give adequate protection to the upper rooms, but if laid on felt-covered boards they materially assist in that direction.

As the roof is designed to carry off rain water as speedily as possible without saturating the walls of the building or the subsoil around it, it is essential that the spouting should be arranged to meet this need. All rain-water pipes or gutters should therefore be kept away from the walls an inch or so, in order that, in case of overflow or leakage, the water may discharge itself into the soil without touching the walls of the building.

Internal Walls.—These, when the surface is rough or improperly covered, are a source of danger to health. It has been found, for example, that ordinary plaster, if not painted, absorbs moisture and organic matter to an alarming extent. Fermentation is certain to result from the presence of such foreign material, and the injurious gases arising therefrom must inevitably mix with the air of the class-room. When walls of this kind exist, they should be cleansed much more frequently than they usually are, and a disinfectant be added to the fresh colour wash.

The aim should be, in all cases, to produce a wall surface that is both smooth and non-absorbent. Walls made of either of the following materials are satisfactory in this respect, the last being considered the best:¹ (1) plaster covered with a smooth impervious substance (*e.g.* paint and varnish); (2) impervious hard bricks embedded in cement; (3) glazed bricks or enamelled tiles. Occasional cleansing is, however, necessary in all cases; and this might well be done during the three vacations of the year.

In selecting colours for the walls, a tint that will neither

¹ See Lyster's *School Hygiene*.

offend nor tax the eye, nor unduly absorb light, is generally best. Red absorbs much light; but yellow on the other hand, though it absorbs very little light, yet produces more nervousness and fatigue than other colours. Pale green is especially restful to the eye, and it also stands low as a light absorber. A pale greenish-grey, however, is recommended as the most suitable colour.

All unnecessary ledges and projections, and indeed anything that interferes with thorough cleansing, should be avoided.

Entrances, Staircases, and Corridors.—There should be separate entrances and staircases for each department and sex, sufficient in number or size to allow for the dismissal of the scholars in about two minutes. The chief entrances must not be through cloak-rooms, and all entrance doors should be made, for obvious reasons, to open both ways, namely inwardly and outwardly. Fire-proof staircases in which there are no triangular steps are necessary. Staircases, the steps of which should be 13 in. wide and not more than 6 in. high, should be sufficient in number and breadth (4 feet) to provide for cases of emergency, and upper floors that exceed 250 in accommodation should have a second staircase. Where steps lead to an external door, a landing between that door and the threshold is essential. It is desirable too to have (1) a landing for, at least, every flight of twelve steps, and (2) a handrail extending the whole length of the staircase.

Classes ought always to be marched in single or double file, under careful supervision, both from the playground to the class-rooms and from the class-rooms to the playground. Accidents are apt to occur unless steadiness is observed in descending a staircase. Corridors, which should generally be about 10 ft. wide, or staircases should

never be used, even for temporary purposes, for storage of any kind.

Cloak-rooms and Lavatories.—Cloak-rooms should have double doorways, so that scholars may enter by one door and leave by another. They should not be passage rooms nor corridors, nor directly connected with any rooms used for teaching purposes. Ample space is needed immediately outside a cloak-room. Thorough ventilation and good lighting at one end are essential. There should be gangways at least 4 ft. wide between the rails, and the pegs should be sufficient for all the scholars in the school, be 12 inches apart, numbered, of two tiers, and not placed directly one above the other. There is a disposition in many boys' departments to ignore the cloak-room in fine weather. This ought never to be allowed. Considerations of health forbid this disuse.

It is further desirable to have concrete floors and walls of glazed brick in cloak-rooms, which should be so thoroughly heated and ventilated that wet clothes may be rapidly dried. Metal frameworks similar to that in Fig. 7, with its multitude of apertures, through which the heated fresh air can freely circulate, have been found very efficient.

One lavatory basin for about every fifty children is considered sufficient, but this can hardly be regarded as a satisfactory provision for cleanliness. One basin for every twenty-five scholars seems necessary. The absence of proper accommodation of this kind is not only mischievous in its direct effects, but also in its ultimate tendencies. As personal cleanliness is of the utmost importance, it ought to be regarded as one of the chief lessons to be learnt in school life. It is well, therefore, for the school to begin this lesson by providing suitable lavatory accommodation.

A cloak-room is not a proper place for lavatory fittings of any kind.



Fig. 7.

METAL CLOAK-ROOM FITTINGS.

✓ **Lighting—Natural and Artificial.**—Dark corners or dark places are harmful. As regards class-rooms, left lighting is best, that is, light directly striking the scholars' left shoulders when facing the teacher. Supplementary

windows are, however, often necessary for ventilating purposes. When left lighting is impracticable, right lighting should be secured, if possible. Official approval is not extended to sky-lights except for halls, and then only when "ridge or apex ventilation" is necessary. Light that comes mainly from behind the scholars or immediately in front of them is of the worst kind.

The ideal light is that which is abundant and well-diffused. It should be abundant on account of its purifying qualities, and well-diffused because dark places, shadows, and the direct impact of light on the eyes are more or less injurious. The sills of the main windows should be placed not more than four feet above the floor; the tops of the windows should reach the ceiling, and the upper parts of them made to swing. Large wall spaces between the window heads and the ceiling produce foul rooms. All kinds of glazing that diminish the quantity of light and are difficult to clean should be avoided. The glass-line of the window furthest from the teacher's table should be on a line with the back of the last row of desks.¹ A proper arrangement of blinds will not allow the direct rays of the sun to fall on desks—a necessary precaution.

In some urban centres it becomes necessary to improve the lighting in class-rooms, because the sky line is obstructed by the height and proximity of other buildings. Devices for improvement involve the use of (1) reflectors, (2) glass prisms, and (3) ribbed glass. The prisms are so arranged in a part of the window that light is deflected to the white ceiling and thence distributed over the class-room. The ribbed glass, however, is supposed to give the best results. It has a smooth surface on one side, and twenty-one ribs to the inch on the other, the ribs being placed horizontally. It is claimed for this glass, if fixed to the upper sash,

¹ See Board of Education's Building Regulations.

that it will, on dull days, improve the illumination by fifty per cent. at least.¹

The light on a desk placed in the most unfavourable position should not fall below the power of fifty candle metres²—otherwise eye strain will result.

Interior colouring has an important bearing on lighting. The colours and tints used for walls, ceilings, and fittings should be restful to the eyes. In some areas teachers are advised in good time of the intention to repaint the school and requested to suggest the interior colouring. It sometimes happens that the happiest choice is made.

In recent buildings, in accordance with the Board of Education Regulations, the windows are large and numerous, and reach nearly to the ceiling. The "dim religious light" may be productive of sentiment, but it is inimical to health when associated with schools.

Assuming that rooms are adequately provided with openings, it is extremely important that the glass be kept clean; otherwise the passage of light to the rooms will not only be seriously obstructed, but the dirt and organic material deposited on the glass may prove injurious to the health of the children. In any case, such deposits necessarily lower the vital properties of the air, and may, if one pupil in the class is suffering from incipient disease, be the means of causing infection. °

Illumination by gas with the ordinary burner is one of the worst forms of artificial lighting. It uses up large quantities of oxygen, creates dirt, and charges the air with many impurities inimical to health. The evils attendant on gas lighting are, however, somewhat mitigated if incandescent burners and mantles are used. The Siemens

¹ See Lyster's *School Hygiene*, p. 47.

² A candle metre is the illumination given by a standard candle placed one metre distant from a certain spot.

Regenerative Gas Lamp, too, is not only an extremely powerful illuminant, but has the further advantage of carrying off its own fumes, besides rendering material assistance in the removal of vitiated air that is usually found near the ceiling. This is an excellent lamp for large rooms and halls. The Wenham is also another good burner, the flame being enclosed in glass globes, and the products of combustion being forced from the room as soon as produced.

The electric light appears to be the most suitable for schools. It is clean; and if of sufficient candle power and not hung too high, it renders the most efficient service.

Heating and Ventilation.—Heating and ventilation are inextricably involved and must be considered together. Good ventilation consists in driving foul air out of the room as soon as created, and replacing it, without causing draughts, by fresh air containing normal quantities of oxygen. This seems a very simple matter, but it has proved to be one of the most difficult of all problems. It is certain that many schoolrooms are poorly ventilated even when reasonable use is made of the appliances available. The *odor scholasticus*, especially during the winter season, is only too evident. Besides the ordinary means of ventilating by open windows, Tobin's tubes, chimney extractors, wall and ceiling gratings, and open fire-places have so far failed to give that adequate and continuous supply of fresh air which is desirable. Tobin's tubes, generally placed in corners of rooms, are a valuable means of inlet, while separate air chimneys are serviceable in providing for the outflow of foul air containing such deleterious impurities as carbon dioxide and albuminoid ammonia.

Fresh air contains four parts of carbon dioxide (CO_2) to every 10,000 parts, or .04 per cent. An atmosphere that

contains about ten parts in 10,000 is injurious to health. It has been found by experiment that carbonic acid gas takes up the space of fifteen or more parts in 10,000 in some school class-rooms just before the recreation interval—and this, too, when reasonable use has been made of the means of ventilation at hand. Haldane's apparatus is able to record the amount of CO_2 impurity in a room any time during the day.

It is a singular fact that children give out from their bodies proportionately a larger quantity of organic impurities than adults. These impurities, ordinarily consisting of the tiniest particles of epithelium and fatty matters, together with CO_2 , etc., ought to find a ready means of exit from the rooms; otherwise these small organic particles get deposited on the walls and their ledges—especially if the walls are cold—and make demands upon the oxygen of the rooms that is needed for other purposes. The *odor scholasticus* is mainly due to these organic substances in the air.

This tendency to deposit on the school walls shows the desirability (1) of never allowing the walls to get abnormally cold even during the night, since they take a comparatively long time to get restored to the temperature of the room's atmosphere again, and (2) of ventilating the premises thoroughly immediately after the morning and afternoon sessions. Lofty rooms, though they give extra cubic space, do not help to maintain a good atmosphere or to promote sound ventilation. Indeed, it is considered that a height above 14 ft. may prove baneful unless the openings are correspondingly high.

Good ventilation should provide at least 1,800 cubic feet of fresh air per hour for every child and not allow air to stagnate in any part of the building. It should further provide that the admitted air be approximately of the

same temperature as that which is in the room, for when the air is warmed before admission it prevents draughts. This can, to some extent, be effected by devices in aid of natural ventilation and also by means of certain forms of mechanical or artificial ventilation. The Plenum system, for example, claims to do all this. It drives the warm air into the rooms near the ceiling and draws out the foul air on the same side of the room near the floor. In this way every room can have a renewed atmosphere from eight to ten times in an hour.

When, however, *natural* ventilation, as distinguished from *mechanical*, like the Plenum system—which cannot be regarded as a success—is adopted, the windows should be largely used as outlets for foul air in the cold season; they should also be used as far as possible at all times for inlets, especially when the air temperature external to the school is not much lower than that within.

The value of the recreation interval, from the ventilation point of view only, is great. As soon as the room is cleared all doors and windows should be opened, so that the children may return to an atmosphere as pure as that in the playground.

It is clear that sound ventilation must provide inlets for fresh air as well as outlets for what is foul. The latter are usually placed near the ceiling. A valuable outlet, too, is the chimney itself; and if to this is added a separate air shaft carried up in the same stack with the smoke flues and rendered permanently effective by warmth or exhaust, the provision for outlets, including gratings near the ceiling and the use of the upper sashes of windows, is fairly complete.

The chief inlets for fresh air are the windows, Tobin's tubes, grates like Dalton's, and ventilating stoves. There are many devices in connection with windows for secur-

ing good ventilation without draughts. Among these are (1) the draught board, (2) Hopper openings, (3) the Louvre ventilator, and (4) the Chaddock window. (1) is a vertical board or framework of glass, a few inches high, fastened on the inner ledge of the window so that the lower sashes can be raised for the admission of fresh air which

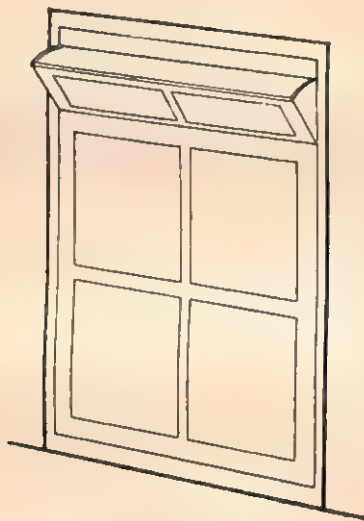


Fig. 8.

HINGED TOP TO WINDOW.

can flow into the room, taking an upward direction, between the window plane and the board in question. (2) This opening is usually effected by means of the upper part of the window, which works on a hinge and is made to slant inwards. The triangular spaces thus created at the sides must be covered in by wood or glass in order to prevent a downward current, and thus the whole of the incoming air is forced upward (see Fig. 8). Arrangement (3) con-

sists of a few bands of glass (arranged and worked like a Venetian blind) that form a part of an ordinary window. The bands in every case slant upwards from the outside and thus compel the air to take an upward direction. (4) The illustration of the Chaddock window will speak for itself. It is easily manipulated and has proved an unqualified success.

A Tobin tube provides for entry of the external air through a grating in the wall at the floor level. A vertical tube then directs the air upwards, at the top of which is a valve which automatically regulates the quantity of air coming into the room.

Electric fans are often useful aids to natural ventilation.

Artificial ventilation depends on two processes, (1) Extraction, (2) Propulsion. *Extraction* depends on the principle of the vacuum. Vitiating air is extracted or driven out and fresh air naturally flows in through the channels provided for that purpose. By *Propulsion* the fresh air is forced into the chamber and the foul air is drawn off at the floor level. The best systems usually combine the two processes.



Fig. 9.

THE CHADDOCK WINDOW.

It is best, however, to place faith in natural ventilation, accepting in connection therewith such useful minor aids as the ingenuity of man can supply. Elaborate artificial contrivances are pre-doomed to failure.

Heating and ventilation depend on one another. Heating is ventilation's motive power. Heating is effected by (1) open fires or closed stoves, (2) gas fires or stoves,

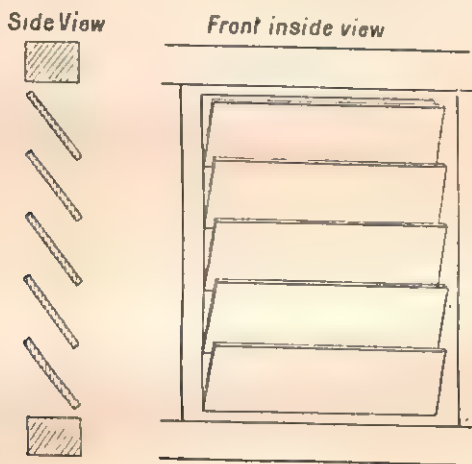


Fig. 10.

LOUVRE VENTILATOR.

(3) warm air, (4) hot-water pipes; or, taking a scientific principle of classification, by (1) radiation and (2) propulsion. Convection, of course, plays an important part in all systems of ventilation. Galton's grate, which is largely used, has a warm-air chamber behind it. The chamber draws the cold air from the outside, and, after warming it, discharges it into the room through gratings. Whenever stoves are used they must be fitted with a flue to carry off the fumes.

Open fires materially assist in ventilation and are cheerful: on the other hand, they are wasteful, only about 15 per cent. of the heat generated being used to warm the room, and even then the heat is not well distributed. Stoves give a fairly equable distribution of heat and are, as a rule, the least costly of all forms of heating; they, however, need much attention, are liable to get out of order, and make the atmosphere some-

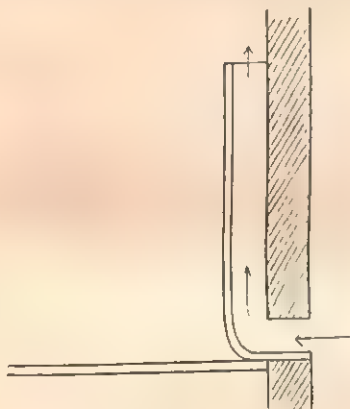


Fig. 11.

TOBIN'S TUBE.

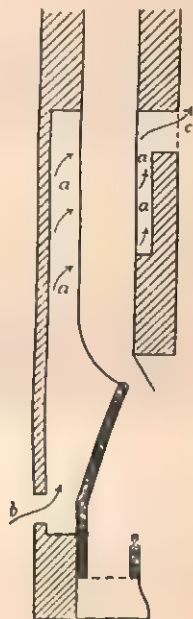


Fig. 12.

THE GALTON GRATE.

"a", Hot-air chamber surrounding fire; b, opening for fresh air; c, inlet into room.

what heavy. With regard to hot-water pipes and hot-air radiators, they usually secure an equable distribution of heat and a purer atmosphere than that associated with stoves or open fires; but the air loses its humidity and freshness unless porous vessels containing water are present. It is desirable therefore to have a wet and dry bulb hygrometer in each

class-room when the building is heated on either of these two systems.

The temperature in an infants' school ought not to be allowed to fall below 60° F., while that for the senior scholars might vary from 56° to 60° F. In no case ought the temperature to fall below 50° or to rise above 60° , that is, of course, if it lies within human power of control. When the temperatures of the air inside and outside a school differ by 10° F., a draught will be caused unless precautions are taken.

In summer time, when the heat is great, sprinkling the floor occasionally with water helps to keep the temperature down.

Each class-room should be furnished with a thermometer.

An open fire is desirable, and a temperature of 60° is essential, for babies' rooms. The Board only approve of stoves "with proper chimneys and supplied with fresh air direct from the outside." Further, stoves must not "become red-hot or otherwise contaminate the air," and must be so placed as not to interfere with "floor space necessary for teaching purposes."

All fireplaces and stoves should be furnished with fireguards.¹

Sanitary Arrangements.²—Scholars' latrines should be in the playgrounds and completely separated, and if possible well removed, from the main school building. They should, of course, together with their approaches, be

¹ On the subject of ventilation the student is referred to Lyster's *School Hygiene*; *School Hygiene*, by Newsholme and Pakes; and the Report of the Medical Officer (School Board for London) for the year ended March 1904.

² See Board of Education Rules for the Planning and Fitting up of Public Elementary Schools.

quite distinct for boys and girls. Offices not provided with either automatic or individual means of flushing should be flushed at least twice a day by the caretaker.¹ It is essential to have a full and ready supply of wholesome water for drinking purposes, and, so far as local conditions will admit, the best possible sanitary arrangements.

Desks.—The rules of the Board of Education in reference to desks may be thus summarised: (1) Seats and desks, with backs to them, must be provided for all scholars suitably to their ages, and must be arranged at right angles to the window wall. (2) Each scholar should be allowed at least eighteen inches, and there should be gangways of eighteen inches between groups of desks and between desks and walls. (3) Desks should not be longer than twelve feet, and not more than six rows deep. (4) In the case of long desks, the teacher must be able to pass between the rows; and in the case of dual desks, behind the back rows. (5) An inclination or slope of 15° for each desk is sufficient. Flat top desks¹ are objectionable. For writing purposes the "distance" should be zero. (The "distance" is zero when a vertical line from the inner edge of the desk exactly meets the inner edge of the seat. When the seat goes beyond that line, or does not reach it, the "distance" is respectively *minus* and *plus*.)

Usually desks are made in six sizes, graduated to meet the needs of scholars of various ages. There is much variety of opinion concerning "distance," some advocating the *plus*, others the *zero*, and others again the *minus*. The first must be condemned, as it encourages, and sometimes necessitates, stooping. The *zero* or *minus* distance is best for desk work with pen or pencil, since both, and especially

¹ This does not apply to kindergarten desks.

the latter, render the erect posture comparatively easy. The use of the flap in dual desks should not be neglected. It is not only valuable for reading purposes, but also for giving freer play to the body during oral lessons. It further enables the scholars to stand comfortably erect without leaving the desk.

(1) *Dangers from Improper Desks.*—The importance of having desks to meet the needs of each scholar has not yet been sufficiently recognised. Spinal deformity, cramped chests, short-sightedness, eye strain, and stooping habits are, among other evils, the outcome of compelling children to sit for hours daily in desks unsuited to their physical proportions.

Preference must be given to the dual, rather than to the long, desk. The single desk, largely used in the United States and Canada, is again better than the dual. The use of the single desk, however, considerably reduces the accommodation of a room—by about thirty-three per cent.; but in all other respects it is eminently satisfactory and easily takes first rank in all appliances of this kind; and this is especially so from the hygienic standpoint.

(2) *"Sheffield System."*—The "Sheffield System" of desks is in favour in many schools in the North of England. In this system the desk is long and accommodates, as a rule, six pupils, but the seats are isolated and screwed, like the desk itself, to the floor. It is claimed¹ for this system that every pupil is easily accessible, that the lateral space between the seats enables the pupil to stand—so that drill, for example, may be taken—that it becomes impossible to overcrowd a room, and that it facilitates the sweeping and washing of floors. The desks are made in various sizes, the seats having corresponding heights.

¹ See Report of Medical Officer (School Board for London) 1904.

But this system is not without its defects, which may be thus enumerated: (1) The desks have the *plus* distance. (2) The back-rest is too small and does not, as a rule, support the back in the most suitable place. (3) Scholars, though seat-isolated, are really nearer one another than in most dual desks. (4) They induce fatigue to a greater extent than the dual or single desk. (5) There is no provision for placing the book in the right visual position for reading—from 45° to 60° . (6) The class roll must be strictly limited to the official accommodation of the room. This, however, is good from the purely educational standpoint, though not always so from the administrative point of view.

General Conditions for Good Desking.—(1) The desk should fit the child, the nearer end of the desk being

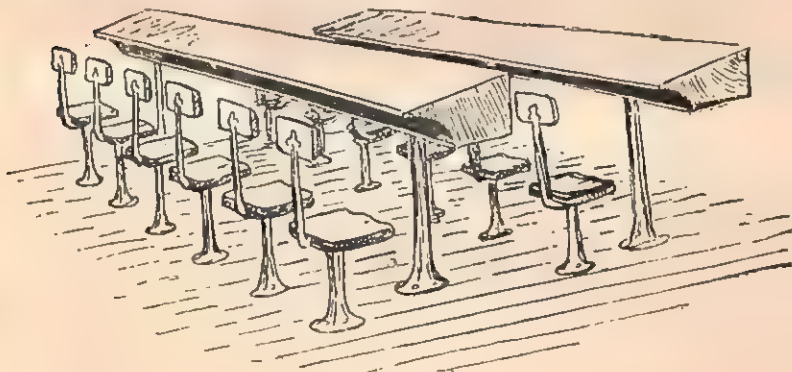


Fig 13.

THE "SHEFFIELD SYSTEM," SHOWING AN ISOLATED SEAT FOR EACH SCHOLAR.

opposite the navel. (2) Each child in a class having found a suitable desk should be allowed to retain it for six months, when seats should be redistributed. Some

children grow so rapidly that a year ought not to be allowed to intervene between each redistribution. (3) Each class-room should be supplied with at least three different sizes of desks,¹ all of which should have comfortable back-rests. Age is but a small criterion of the physical proportions of children. (4) Each desk should allow of reasonable freedom of movement and permit of occasional standing. (5) The scholars should be easily accessible.

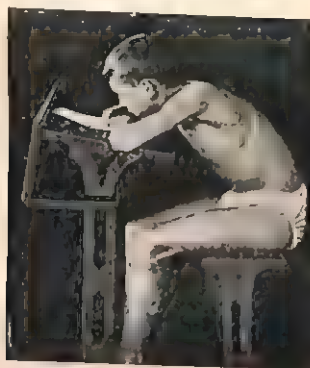


Fig. 14.

COMMON POSITION FOR WRITING IN A PLUS DESK.

(6) The desk should be firm and rigid and have an angle of 15° to the horizontal. The minor features associated with suitable desks are presumed.

The fitting of the desk to the child includes also facilities for securing the upright posture and balance of the body. This balance can only be obtained when the thighs are approximately horizontal, the *tibia* vertical, and the feet firmly resting on the floor. Further, steadiness is given to

¹ That is for Senior Departments. Probably two sizes of desks would suffice for the lower grades of an Infant School.

the body if the left forearm rests on or near the edge of the desk and almost in a line with it. By these means the chest is free for expansion, the abdominal viscera are not cramped, there is an absence of physical conditions calculated to impede circulation, and thus energy is economised and mental activity promoted.

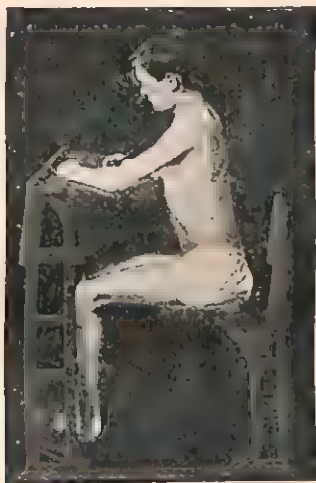


Fig. 15.

GOOD POSITION IN ZERO DESK.

This position is tiring because there is no support for the back.

It is especially desirable that the desk should allow of the regulation distance between the eyes and the object. This varies from ten to sixteen inches.

It is not possible to secure these conditions with the ordinary long desk unless there are many sizes, and the scholars are carefully classified before allocating places to them. It is evident that if the *seats* of desks, which should

never be flat but always slightly concave, were made adjustable, a much larger number of desk sizes would not be needed, and the necessity for a periodical redistribution of seats would not be so pressing. Height of children is not always a guide in selecting suitable desks for them. Any two scholars, for example, of the same height might be taken, and they would probably be found to differ in length of trunk, legs and arms, all of which are factors in determining suitability of desks. Girls, too, differ in this respect from boys, for they have generally longer bodies and shorter limbs. It is important also to realise that from twelve to fourteen years of age girls grow much more rapidly than boys.

An excellent dual or single desk, which is only to a minor degree adjustable, is used in Holland. It has a *plus distance* of about two inches, but the slope is a sliding shutter (beneath which the pupils' books and implements can be stored) which can be moved towards the sitter and thus transform the desk into one possessing a *zero* or *minus distance*, as occasion may require. When the shutter is closed, it covers the inkwell, and thus prevents the dust from accumulating there.

In Lucerne, experiment has shown the desirability of having from five to seven different sizes of desks for each class. In Chicago, measurement of children proves the necessity for supplying each school with five different sizes of stationary desks and three sizes of adjustable desks. The Child Study Committee has, therefore, recommended that each class or grade be supplied with from 75 to 85 per cent. of stationary desks suitable to the physical proportions of children generally found in a particular grade, and also from 15 to 25 per cent. of adjustable desks.

Most scholars take up the forward sitting position which usually results from improper desks, and especially those

that have the *plus* "distance." The tendencies of this position are to impede circulation, weaken the eyes, cause muscular strain, fatigue, and in the course of time even spinal curvature.¹

The general use of the single desk, made in a variety of sizes, would solve most, if not all, of the desking problems. There is, however, no reason why school life should be so largely affected by the possibilities of the desks. There is far too much sitting in the class-rooms. Standing now and again for a few minutes in reading or oral lessons, and on other occasions when this position is not incompatible with work, relieves monotony and tends to energise the body. But there are proper and improper ways of standing. Generally the body should be erect, its weight about equally supported by the legs, the balls of the feet as well as the heels playing their part in this support. The head too should be thrown well back and the chest forward. If standing is prolonged, the stand-at-ease position should be adopted, subject, however, to the general conditions already named.

X **Infant Furniture.**—Level floors have already been advocated for infants up to five years of age. Kindergarten dual desks are fairly suitable for such children; but a much better arrangement is the provision of low tables, at which, seated on miniature chairs, from two to four children can find accommodation. (The distribution of a class into small parties, together with the homely suggestiveness of tables and chairs, encourages the social instinct and excites self-expression. This arrangement is particularly beneficial to timid and nervous children. Supervision by the teacher and accessibility to the scholars are rather improved than

¹ See Child Study Report (No. 3) 1900-1901, Chicago Public Schools. See also Burgerstein's *Schulhygiene*.

otherwise by this plan for kindergarten instruction. With the chair the child has a freedom of movement that is most desirable at this age. Change of position diminishes the possibilities of fatigue; fatigue creates fretfulness and lessens memory power. The sunshine of happiness is best for growth and development physically, morally, and intellectually. (The face to back position necessitated by groups of desks discourages the social sentiment and really isolates scholars, though sitting together and forming the same class.)

Wall Boards, etc.—It is well for infant class-rooms to have a composition wall strip—chocolate colour is probably the best—within easy reach on every side. Many schools have this arrangement for free-arm drawing; in others small blackboards are fitted into grooves attached to the walls of halls and of one or more class-rooms; or, when a hall is available, miniature blackboards and easels are supplied for the use of individual scholars, who do most of their free-arm drawing there. Free-arm drawing can also be done in desks, by means of wire easels affixed thereto, into each of which fits a large millboard. The instability of the frail easel is, however, a drawback. The easily cleansable composition strip is probably the most suitable, especially as it compels scholars to stand whilst drawing.

Indeed, infants, as well as other scholars, have far too much sitting in school. Standing occasionally, whilst at work, for ten or fifteen minutes—and sometimes even longer for older children—is a wholesome exercise. The arm has, for example, freer play in drawing when the scholar is standing, and can therefore work with better effect. For these reasons the drawing wall strip is a desirable adjunct to every class-room in both infants' and senior departments. It has, however, its strict limita-

tions, inasmuch as only from one-third to one-half of the scholars of a class can have this form of free-arm drawing at the same time. The wire easels impose no such limitation, though in other respects they are less satisfactory.

✕ **Blackboards, Cupboards, etc.**—Wall slates, in addition to the ordinary blackboards and easels, are a desirable acquisition to every class-room. Fixed slates are especially valuable for information which it is desired to keep before the eyes of the class for some time. It is known that the larger the number of senses that can be appealed to, the greater, as a rule, is the educational effect and the stronger the mental image created thereby. This, of course, has an important bearing on memory, that plays a giant's part in the educative process. Memory lends itself to the perfection of accomplishment by a nicer co-ordination of forces in the repetition of any act. The audio-visual memory is, as a rule, stronger than either the auditory or visual alone. Again, the audio-visual-articulatory memory is stronger than the audio-visual one; and so on.¹

Blackboards in combination with wall slates often obviate the necessity for eye-straining on the part of the scholars.)

In this connection the teacher should remember that chalk dust, if inhaled, is injurious. It is well therefore to have the duster slightly moistened, and thus prevent the dust from getting into the air of the class-room.

Each class-room should have its own cupboard for current stock. Cupboards built into wall recesses give generally a neater appearance to a room than those not so fixed.

Every school should have a First Aid equipment, proper

¹ See Child Study Report 1900-1901, Chicago Public Schools.

accommodation for ink trays, and a museum case, the last-named to contain only such objects as are likely to be generally useful in illustrating lessons. This case should not, therefore, be used, as it frequently is, for a collection of curiosities that are rarely moved from their positions, and occupy space that could be better filled by really serviceable objects. It is well to encourage the scholars to assist in furnishing a cupboard of this kind, the *omnium gatherum* principle being strictly tabooed.

It is scarcely necessary to add that every infant department should have a complete kindergarten equipment.

4. **The Teachers' Room.**—School premises can hardly be considered complete without a room or rooms for the teachers, comfortably furnished and adequately supplied with lounge chairs, a reference library, and lavatory accommodation. As their work is of an arduous nature, an easy means of rest should be assured to the staff when not on active duty. A storage room for school material should, as a rule, adjoin a room of this kind.

Oiled Floors.¹—The presence of dust in the air of the school-room and its accumulation on ledges, picture frames, and tops of cupboards are sources of danger to health. An experiment is therefore in operation in some areas with the view of eliminating, or reducing to a minimum, this danger: it takes the form of *oiling the floors*. This plan does much in the way of accomplishing its purpose, though the appearance of the floor after the oiling operation leaves much to be desired. Mistresses, too, complain of the damage to their skirts, and justifiably so. However, the present device will probably soon lead to a better one. A large experience of oiled floors has now

¹ See Report of the L.C.C. Medical Officer (Education) 1910.

been had in Germany, and in an official memorandum the Prussian Minister of Education discusses the results, and summarises them thus:—

“The experience now obtained shows that the use of oil for floors is only to be strongly recommended when the following methods are used: (1) The oil is to be applied during holidays, and as early as possible, so that with soft white wood floors of fir or pine at least forty-eight hours, and with harder floors, as oak or beech, at least three days, elapse before the opening of school. (2) The floors must be thoroughly washed with hot water and soap or soda, and then completely dried before oiling. (3) The oil is best applied in a thin and even coating by means of a felt rubber. (4) To avoid any unpleasant odour, or unsightly colouring of the floors, only fresh and, as far as possible, colourless oils should be used. (5) The renewal of the oil should be proportionate to the amount of traffic; in little used rooms, halls, art rooms, and so on, twice yearly, in the ordinary class-rooms thrice, and in corridors four times yearly. (6) Stone floors and steps of either wood or stone should never be oiled. (7) Drill halls and gymnasiums should not have the floors oiled. If this is done it must be done with the greatest care. (8) Wet cleansing is not needed on oiled floors, only a daily sweeping with a broom. Any occasional wet cleansing should only be done with thoroughly wrung-out cloths.”

CHAPTER II.

"The vitality of any system of education must depend mainly on the spirit in which it is worked, on the enlightenment, sympathy, and energy of the teachers, and on the interest and industry of the scholars."—*Pref. Memorandum, Code 1910.*

"For every piece of wise work, so much life is granted."—
RUSKIN.

THE CLASS.

THE SIZE OF THE CLASS IN THE ORDINARY SCHOOL.

The Class as a Working Unit.—Although the individual is the unit in a school, yet in the sense of organisation the class must be taken as the working unit, that is, an aggregate of individuals grouped together for purposes of a definite course of instruction and training.

It is manifest that a lecturer engaged in the elucidation of any subject is in a very different position to that of the class teacher. In the former case, the number of people who constitute the audience is immaterial, provided the speaker's voice is able to reach every person in the assembly. It is not necessarily the lecturer's duty to see that his audience *has* profited by his expositions, nor to apply tests to discover how far each person has acquired the information he desired to convey. The lecturer's duties end mostly with his best efforts to interest or instruct his audience. The teacher's task is much more

far-reaching than this. {He has not only to expound, unfold, and interest, not only to see that everything is presented in such a way as to cultivate each child's mental power, but also to see that the information given goes home, as far as possible, to every member of the class. In other words, more generally stated, he must apply David Stow's maxim, "The teacher has not taught unless the child has learned"—learned, that is, in the sense that the knowledge acquired becomes a living thing; but above all, he must not assume that the children are empty vessels into which it is his duty to be continually pouring gratuitous information.}

To accomplish this aim, the needs of each scholar, even the one with the least mental power, must be carefully considered. {As the speed of a fleet has to be governed by the slowest vessel comprised in it, so the rate of progress of a class must, to some extent, be influenced by its dullest member.} There is nothing detrimental in this so far as mere curriculum is concerned. It is only nature's way of suggesting the brake. (*Go slowly and be thorough* is the best possible motto for the class teacher. Testing, revision, supplementing, and, as far as possible, attention to individual scholars, are the necessary accompaniments to substantial class progress.) Moral control must be inculcated¹ and moral stimulus applied. The dull must have their vision clarified, the idle must be quickened, the indifferent encouraged, the obstinate subdued, all forms of resistance removed or minimised; and the teacher's energising spirit should reach out to every scholar. From all this it will be seen how essential it is to place strict limitations on the size of the class, if the teacher's work is to be wholly and individually effective.)

¹ "The worth of man depends not upon his knowledge but upon his will."—HERBART.

X Size of Classes and Variations.—(These limitations, however, will vary with circumstances, even supposing that the standard of efficiency is constant. It is clear that the size of a class may depend upon the ability of the teacher—the ease and lucidity with which he is able to present facts, his moral power, his insight into character, his energy, the intensity and extent of his capability of covering the class with his eyes; it should vary as the scholars' attainments and receptive powers are more or less on a level; it must vary directly as the dimensions of the class-room, and it may vary according to the character of the subject of instruction and the way in which it is taught. A practical science lesson, for example, with only one teacher in charge, should not, as a rule, be given to more than twenty scholars. A vocal music lesson, on the other hand, might desirably include as many pupils as a hall or room would accommodate, provided the instructor is capable of holding and interesting them.)

(The size of a class may, and often does, vary according to its relative position in the school—whether it is one of the upper or lower classes. In the upper school, the necessity for revision, correction of exercises, and general closer supervision of the work, makes large classes a practical impossibility if any high standard of attainment is aimed at.) And finally the number of scholars in a class must vary according to the Regulations of the Board of Education and those (if any) of the Local Authority, so far as they concern the accommodation¹ of the room or the status² of the class teacher.

There remains, however, one more condition of variation to be noticed, which is an exception to one cited above, viz. the special purpose for which a class is formed. It is

¹ Art. 14 and Art. 19, Code 1910.

² Art. 12 and Art. 32, Code 1910.

evident that children of extremely low attainments and of exceptionally poor ability should be grouped together in much smaller classes than those possessing normal powers of progress.

The limitations to the size of the class have been, in the past, extremely varied. They have been determined, in most instances, more by the iron hand of economy than by educational considerations. Of late years, however, some enlightened Local Authorities have done much to reduce the class to reasonable limits, with the indirect result that this influence has reacted upon others and produced a general tendency in the right direction. The English limit for a certificated class teacher works out at 60 children—it may be in habitual attendance.¹ Similarly an uncertificated teacher is limited to 35² and a student teacher³ to 20.)

It is almost axiomatic to say that these numbers are too large—certainly so far as the certificated teacher is concerned—bearing in mind the searchingly individualistic duties that devolve upon the class teacher. They are faulty in three respects. In the first place, the numbers are too high absolutely; in the second place, no allowance

¹ "Habitual attendance" is not equivalent to average attendance [see Art. 14, Code 1910, and compare with Art. 12(a)]. The averages would, of course, be less. The average for the London County Council area including head teachers is about 41-42. In these schools the limit for a certificated assistant teacher is about 50 in average attendance. This is based on an unwritten law which is often generously interpreted. Pupil teachers are not always considered in the staffing arrangements. Student teachers, however, are often qualifying factors in fixing the staff.

² Art. 12 and Schedule I., Code 1910.

³ Art. 12, Code 1910, and Art. 38(b), Regulations for the Preliminary Education of Elementary School Teachers. See also Schedule II. of the Code.

is made for classes of scholars containing two or more grades or standards; and thirdly, no differentiation is admitted between the upper and lower classes of a school. The last two points are very important. No staffing scheme can be considered satisfactory which excludes these from view, unless it is an exceedingly liberal one based on general principles.

Some modification of the official rule seems to be desirable.¹ The warning note attached to the article in question points to the need of adjusting the staff to every variety of conditions. It must be understood that the Board of Education only lay down the *minimum* staff as "a condition precedent to a grant." This minimum "must not be understood to indicate that a school thus staffed" is necessarily efficient. In every case the circumstance of the individual school will be considered in relation to the educational conditions of the area and the sufficiency of the staff thus tested.²

In the United States and the Colonies the practice compares favourably with ours. In New York the limit for a class is 50 and the average attendance per teacher is 39,³ excluding the head and visiting teachers. In Queensland the average for a teacher is 29.⁴

The class numbers vary greatly in different parts of Germany. The tabulated statement below represents the average number per teacher in the Berlin schools,⁵ Class I.

¹ Art. 12(a), Code 1910.

² Art. 10, Code 1910.

³ The average roll per teacher, including the head, is 44. *Vide* Report of City Superintendent for 1903.

⁴ Report for 1903.

⁵ Report of Mr. Andrew, Scotch Education Department, 1904. The average number of pupils per teacher for the German Empire was 61 in 1901. *Vide* "History and Organisation of Public Education in the German Empire, 1904," by Dr. Lexis.

being the highest and corresponding with Standard Ex. VII. in England.

Class I...35.	Class V...50.
" II...35.	" VI...54.
" III...41.	" VII...56.
" IV...45.	" VIII...57.

In Berlin the schools are organised on the "eight-class" system, the scholars varying in age from 6 to 14. The classes represent grades similar to the English standards, now not officially recognised.

Assuming that the Berlin numbers do not differ materially from the roll, they may be regarded as a fairly reasonable compromise between economical and educational claims, and would present on the whole a satisfactory working arrangement if the numbers in the three lowest classes did not exceed 50. Under English conditions, certainly, especially in some areas, the numbers in the three lowest classes must be considered too high for thoroughly efficient work. Something approaching the educational ideal will be attained when the average number of scholars per teacher in a department is not allowed to exceed 40,¹ assuming, too, that each member of the staff is fully qualified: but as economical considerations have necessarily to play an important part in education as in all other mundane things, it will probably be some time before this desirable limit is reached in every part of the country. It is no more practicable to disregard these considerations than it is "to leap the world to come."

Reference has been already made to the accommodation

¹ The L.C.C. has accepted this limit for senior departments in the construction of all new buildings. The Dutch teachers of the Social Democratic Federation are aiming to limit each class to 24 pupils. (*Schoolmaster*, Sept. 10, 1904.)

of rooms and the status of the teacher as two of the factors in determining the size of classes, the Code very properly forbidding overcrowding and overweighting. It is impracticable here to deal with all the peculiarities of this case. The one instance may be taken in which a class is too large for the status¹ of the teacher, but not too large for the room.

(Now the status of a teacher is not necessarily a factor in class management. It is, however, a factor when the staff is regarded as a whole in relation to the habitual attendance of all the scholars; for the grade of each member of the staff has certain numerical values associated with it: but these official values are based on generalisations and have their application more in determining the *sufficiency* of the staff than the *suitability* of it, individually considered. The organiser must, however, see that the teacher is *suitable for the work assigned to him*, and on this condition the question of status does not necessarily arise. An uncertificated teacher might have a class of 50 or 60 scholars and a certificated teacher a class of 35 or less, provided always (a) the teacher efficiently fits the class, independently of status, and (b) the sum of the numerical values attached to each teaching unit covers the number of scholars in habitual attendance in the whole school.²) It sometimes happens that an uncertificated teacher has more effective teaching and disciplinary power than a particular certificated one. The organiser can therefore use full discretion in distributing his staff, and still satisfy official requirements. The status of the teacher can then be ignored, within reasonable limits: it would be obviously unreasonable to place a student teacher in charge of the first class, for example.

There are, however, several phases to this question.

¹ Art. 12 (a), Code 1910.

² Arts. 10 and 12, Code 1910.

Take the common instance of the combination of two or three upper classes at the commencement of the educational year, rendered necessary by re-organisation. It often happens that over 60 scholars—sometimes over 70—form one class under a certificated teacher. (The organiser is aware that these numbers will gradually diminish, but in the meantime the position must be met. He then has two courses open to him—either to make a suitable selection from the pupils covering the excess and make separate provision for their instruction, or to give the teacher such supplemental aid as will satisfy the Code.)

The New York regulation deals with this and similar cases, if otherwise incurable, by transferring the excess scholars to another school. This, however, has not proved satisfactory. Another method of dealing with these constantly recurring difficulties and especially that phase of them which concerns the highest classes in a school, which are often too large at the beginning of the educational year and small towards the close of it, is to consider each room as having a marginal accommodation—that is, both a maximum and a minimum accommodation, the maximum to be recognised only as an expedient to meet occasional pressure. Of course the laws of health must be paramount in connection with this proposal. The *maximum* would have to be based on healthy conditions, whilst the accommodation of the department would remain an invariable quantity founded on the total of the minimum accommodation² of each room in it. Probably the most convenient marginal

¹ Art. 14, Code 1910. "The number of scholars on the register of any class or group of classes under the instruction of one teacher must not exceed 60, etc."

² This would prevent technical overcrowding, which is a constantly recurring difficulty. The proposal is only intended to meet the temporary needs of a class here and there.

accommodation would be one in the ratio of four to five, or one additional place for every four on the minimum basis.

As there is no necessary connection between the number of pupils in a class and the accommodation of a room or the status of a teacher, ever-recurring difficulties will arise which the organiser must face and overcome as best he can. Even the official limit of the teaching power assigned to a teacher is not always a safe guide, as already shown. The personal equation must be considered too.

Of these elements in organisation, the organiser is powerless over two, except in so far as he may have a choice of assistants of varied status and power. He must of course take the line of least resistance and make the class fit the teacher, and, as far as practicable, the room. It is essential that he should fit the teacher. But even when this has been done at the commencement of the educational year, the organiser's troubles are not ended in this direction. Fresh admissions, especially in the lower classes, and the uneven progress of groups of children in the various classes will come as disturbing factors. Wise readjustments must therefore be occasionally made; and these will be rendered all the more easy if terminal or half-yearly promotions are carried out, on each pupil's merits.

The annual courses of instruction known as the standards—theoretically standards of examination and not courses of instruction—have been valuable on account of their well-known character, their general acceptance and application; but, being annual, it has been too often assumed that promotions ought not to be made until the end of the year, when, as nearly as practicable, equality of attainments could still form the basis for a new organisation.

The rigidity of the standards, coupled with their annual character, has, no doubt, been partially responsible for the

unnecessary retardation of many scholars and the want of more rapid progress of children, especially those above the average in ability. Now that standardisation has been officially dropped, except for certificates of proficiency, probably it will be conceded that there are no cardinal virtues in the calendar or educational year. The organiser can now, though a great deal of freedom has previously been given by the Code, so arrange his courses of instruction as to meet the special needs of his pupils, and make them as pliable and adaptable to varying circumstances as possible. It is not necessary under existing regulations that the courses should correspond from year to year, provided reasonable grounds can be shown for fresh or even radical departures. No wise teacher, however, would attempt any great change such as would seriously interfere with the due correlation of studies.

What has been said concerning the standards equally applies to the steps or grades in the infant school, but this matter will be considered later when the subject of promotion is discussed.

Large Classes.—It must not be supposed that large classes are to be regarded only as an unmixed evil. That such classes leave much to be desired is incontestable: but they have some advantages, though these are small compared with the gains on the other side. Sympathy is a potent educational force. Sympathy of numbers, springing from each unit in a mass which works with the same aim and in which each is bound to the other by ties of class fellowship, makes for friendly rivalry, moral strength, and intellectual zest. The larger the class, within certain limits, the greater is the play of competing forces. The rousing of moral power sharpens the intellectual appetite.

Large classes—and under this head may be included

the grouping of classes containing scholars of different attainments; for such classes, though not necessarily large in the absolute sense, are nevertheless relatively so—tend also to encourage and develop individual reliance and resource. If there is a real danger connected with some recent educational developments, it is that too much is being done for the scholars by the teacher. The essence of education lies in the *scholars'* doing, not the teacher's. Froebel's motto applies to the pupil, not to the teacher. The latter's true function is that of guide, philosopher, and friend—not a guide who always leads and shows the way, except by moral example, but a guide who will help the pupil to find the right path chiefly by exciting his reasoning power.

(The sympathy arising from numbers acts on the teacher as well as on the scholars. That peculiar unifying moral tie that holds an able teacher to his class is alive with emotional currents passing from him to the pupils and from the pupils to him with mutual advantage. They give the teacher an added power, and often enable him to transcend himself.)

But all this presupposes a strong teacher. In the hands of a teacher of mere average power, or of a weak one, the position is educationally untenable. This must not therefore be taken as a pæan of praise to large classes. It is merely an attempt to show the best side of a weak position.¹ The advocacy for a class of forty pupils, and even for a smaller number in the upper classes, stands unchallenged for all ordinary purposes.

On the other hand large classes, under ordinary con-

¹ "In some cases it may even be said that an insufficient staff has proved a blessing in disguise because the teacher has had no alternative but to make the scholars work for and by themselves."
—*Report of the Board of Education, 1908-9, p. 19.*

ditions, present enormous difficulties and have many grave defects. The gravest defect is the remoteness of the individual—near but yet far. The tendency is therefore for him to become submerged in the crowd and to be regarded as an “average” child, and hence without his own peculiarities; and it is precisely those peculiarities that should be reckoned with in the educative process. It is obvious that no training can be effective which is not, to a considerable extent, based on individual powers and weaknesses. Known quantities and qualities are so much more easily dealt with than unknown ones. The first condition of sound training is knowledge of the individual to be trained. This is the teacher’s side of the position: he should know his scholars through and through. There is also the scholar’s side. He becomes conscious of his remoteness: he realises that he is not understood, that he is only one of a crowd, and thus his sense of personal responsibility to the class and school is not likely to grow, and possibly it may be weakened.)

There are, however, cases and occasions when large classes are desirable or admissible. A vocal music class, for example, might be often the better for combining two or more classes, the only necessary limitations being physical considerations and the teacher’s ability to control and instruct. Lantern lessons also sometimes lend themselves to bigger classes than are admissible under ordinary conditions. The *preparation class* is another example. This is a device practised in American schools, by which the central hall is utilised for private study. This is done to encourage resource and independent effort. It also economises staff, for the teachers thus employed in supervision are only qualified to take a smaller number of pupils under ordinary class conditions. The recital lessons take place in the adjoining rooms, as seen in the accom-

panying plan. This is, however, only economically practicable in buildings adapted to, and equipped for, the purpose.

The One-Teacher or Ungraded School.—This kind of school is usually found in thinly populated and isolated districts, the teacher being unaided except, perhaps, for needlework. The one teacher, therefore, constitutes both the head and assistant staff. Monitors for mere routine work, however, are usually employed. Organisation, under such circumstances, might appear to reach its vanishing point: but in reality it should find, in a limited way, its highest development, if sound efficiency is to be secured and maintained.

The teacher has practically to solve the problem of being corporeally in two or more places at the same time, and also to impregnate the atmosphere of the school with his spiritual presence. The difficulties of the position are apparent, especially if, as sometimes happens, the school consists of pupils ranging in attainments from Standard I. to VI. or VII., or occasionally otherwise complicated by the presence of infants, when the sole teacher is a woman. Under conditions like these monitorial or some kindred help becomes imperative, but such help must not take the form of teaching.¹

The question of the unification of such small schools into a central one, or their absorption into existing larger and neighbouring centres, has been successfully dealt with in some countries. Reasonable distance must, of course, be a factor in any satisfactory solution of the difficulty, even when the distance is covered by vehicles. In America this plan is extensively practised. Canada, too,

¹ See Arts. 11 (f) and 43 (e); also Schedule IV. (21), and par. 13 of the Pref. Memorandum to Code, 1910.

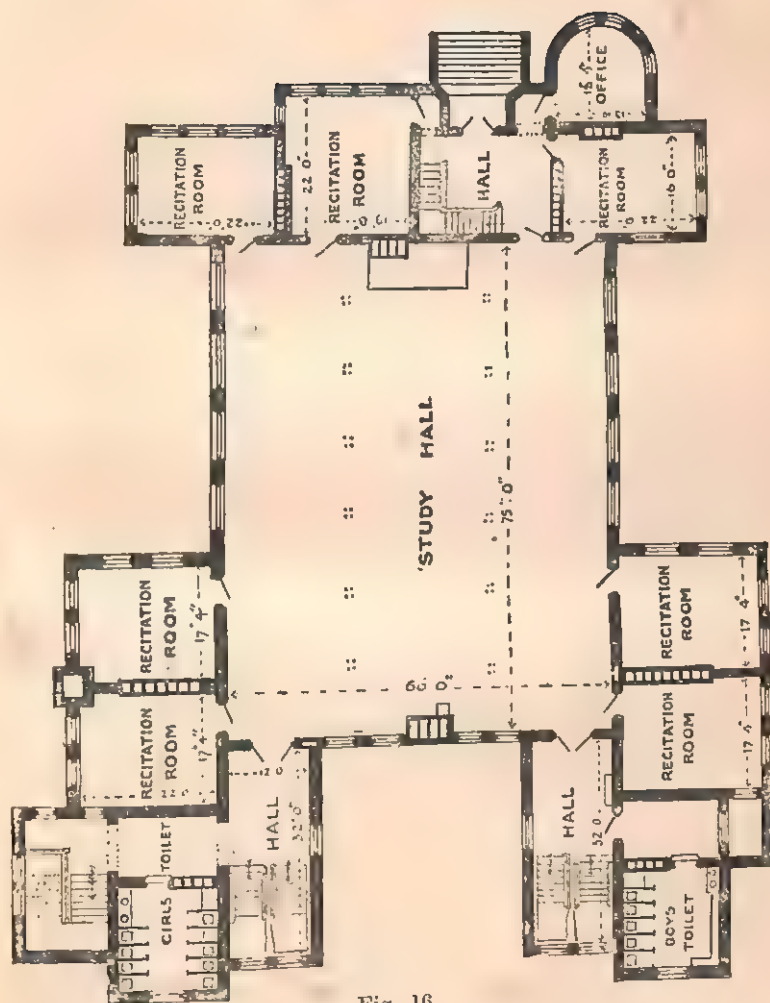


Fig. 16.

PLAN OF AN AMERICAN SCHOOL, SHOWING STUDY HALL AND RECITATION ROOMS,

has recognised its utility, and is developing on the same lines.

In this country,¹ Devon, Cornwall, Gloucestershire, and other areas bring children of scattered districts to school in this way. The attractions of a ride, combined with protection from rain and other inclemencies of the weather, have brought about a better attendance: whilst the advantages of instruction in a large school, meeting in a healthy, commodious building, possessing a stimulating *esprit de corps*, and permitting an organisation on a basis of sound classification, are too evident to be named.

Assuming, however, that no such desirable conveniences exist, it is extremely difficult, if not impossible, to suggest a satisfactory classification and distribution of teaching power for small schools of this type, especially as they vary considerably in different localities. Probably the best organisation would be secured by the teacher taking full advantage of the latitude allowed by the Code in the way of classification. History, geography, grammar, and other class subjects should be taught, as a rule, in not more than two sections; and, as far as possible, subjects that lend themselves to individual and private effort should intervene between each oral lesson. It is essential to encourage individual study to the utmost extent. It is further essential for the teacher to regard the lessons on the "class subjects" as one of the chief means of reaching each pupil in the matter of moral and intellectual training.

Assuming that the school is not complicated by the presence of infants and it contains six or seven grades of scholars, it should be divided into two divisions for purposes of class instruction, the lower division containing Standards I. to III. The syllabuses for the class subjects

¹ See Art. by J. C. Medd in *School*, ii. 88.

should fit these two sections, *composition* mainly taking the place of formal grammar in the lower school. A three or four years' course must be designed for the upper school and corresponding provision made for the lower. It is necessary for each year's course to overlap its successor in order to provide for the needs of promoted scholars. Indeed, endless adjustments, after the syllabus has been drawn up, must be made by the teacher from time to time, to meet the requirements of all scholars in each group of a division.

In the 3 R's, the need for the same kind of divisional treatment does not arise. By careful preparation of work beforehand, on the lines of the attainments of each group or standard in a division, the claims of each pupil could be reasonably met. Since the work under this head depends almost wholly on the private efforts of the scholars, the testing of what has been accomplished is, of course, essential; and this would necessarily have to be done, to some extent, after school hours, which terminate at 4.10 p.m. for this purpose.

In order to insure an effective distribution of the teacher's time, it becomes imperative, while one section or division is occupied with an oral lesson, that the other should be engaged in private study; but this distribution cannot be always absolute. Suppose, for example, that the teacher is immediately engaged with the upper section giving a lesson on geography, while the lower section is employed in arithmetic, the work having been definitely apportioned to each group therein; it is manifestly desirable that the work accomplished in arithmetic should be tested without undue delay. If therefore the two simultaneous lessons cover half an hour, the teacher must devote only about half that time to the oral lesson, and give the remainder of the time to checking and guiding

the work in the lower division, while the upper section or school continues its geographical work on a private effort basis.

This arrangement must apply generally; though in some subjects, *e.g.* history and writing (mechanical), grammar and composition (written), taken respectively by the upper and lower schools, the teacher might give most of the time to the oral lesson, testing the bulk of the private effort lesson after school hours.

It is further desirable that all books and other necessary material for the day's work should be given to each scholar on the opening of the school in the morning. Besides other advantages, this involves a training in personal responsibility. Indeed, in a one-teacher school, the fundamental principles underlying group self-government must be applied if the school is to work on easy lines. Each division should therefore elect its own captain, subject to the veto of the teacher, the senior captain becoming the head of the school and mainly responsible for the scholars' good behaviour, while each would see that attentive industry in private study was in operation in his own section.

Of course to keep a school of this kind thoroughly going, the teacher must not only be full of activity, but he must be continually interesting his pupils by the novelty of new methods, bringing into play fresh ideas, and generally inspiring them with energy and enthusiasm. The school library should be in active circulation, reaching every pupil and every home. History must be largely dramatised and appropriate books throwing side lights on the subject read in school or at home. Geography must become as realistic as possible. A whole section might occasionally be employed in designing the contour of a country, indicating its mountains, rivers, lakes, and large towns by

means of sand; groups or individuals might also be similarly engaged with modelling in clay, or constructing in relief with moistened brown paper, or filling in contour maps supplied for each scholar's use.

A useful means of interesting children is to allocate a corner of the playground to instruction in geography. A few cart-loads of sand, a little clay, a water supply, and some simple implements, will enable scholars to learn more of physical geography in an hour than they would otherwise learn in months. Pupils should be further encouraged to collect specimens representing, in turns, the chief products of the various countries under study.¹ Nature study should find its chief expression in field and forest excursions, notes being taken and rendered into fuller composition exercises later; and arithmetic should be essentially practical—scales, measures, and materials being in constant evidence and use in the lower division.)

But whatever is done, even of the best, something must remain to be desired in a school of this type. Fortunately, it is gradually disappearing under the stress of the more recent official regulations; and schools with one assistant teacher or with one or more pupil or student teachers are taking their place. But even with aids like these, the principles already advocated for the one-teacher school must equally operate. A weekly record of the work done in each division should be kept by the teacher.

¹ Collections of Colonial and Indian products may be obtained from time to time for educational purposes, by application to the Director of the Imperial Institute, London, S.W. The commercial resources of countries within the British Empire may also be studied in the public galleries of the Imperial Institute, where pictures, photographs, and other interesting exhibits may be seen. Arrangements may be made for teachers and scholars to be conducted by members of the Institute's staff, when some guidance or explanation of exhibits is deemed necessary or advisable.

In connection with this subject, it is doubtful whether children up to eight years of age get the fullest benefit by attendance at school both mornings and afternoons. Intensive work in the mornings and comparative freedom for the rest of the day would probably result in more good. If this principle were applied, the work of the school under discussion would be simplified, and the older scholars would probably, by increased attention, be able to advance more rapidly than under existing conditions.

The Time Tables that occupy the two following pages are the actual working arrangements of two highly successful schools of the type under discussion. The Summary below refers to the time-table on p. 82.

SUMMARY.

	Upper Group.	Lower Group.
Scripture	150	150
Arithmetic	200	210
Reading	150	180
English	160	240*
Composition (Written)	90	—
Drill	60	60
Repetition and Literature	75	75
Drawing	120	60
History	80	90
Geography	90	90
Writing or Transcription	60	120
Singing	70	60
Map Drawing	60	—
Object Lessons	60	90
Intervals	125	125
	<u>1550</u>	<u>1550</u>

* Oral Composition is included. Indeed individual oral expression is cultivated in all possible lessons.

TIME-TABLE OF A ONE-TEACHER SCHOOL FOR BOYS.

Open School. Mark Registers		Scripture		Arithmetic		Reading*		Word Building		Interval		Repetition		Mark Registers		Interval		Gardening	
9 to 9.30	9.30 to 10.10	10.10 to 10.40	10.40 to 11.0	11.0 to 11.15	11.15 to 11.45	11.45 to 12								2	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 4.10	Gardening
1	1	1	1	1	1	1	Mon.	Mon.	Mon.	Mon.	Mon.	Mon.	Mon.	2	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 4.10	Object Lessons
2	2	2	2	2	2	2	Tues.	Tues.	Tues.	Tues.	Tues.	Tues.	Tues.	2	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 4.10	Transcription
3	3	3	3	3	3	3	Wed.	Wed.	Wed.	Wed.	Wed.	Wed.	Wed.	2	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 4.10	Gardening
1	1	1	1	1	1	1	Thur.	Thur.	Thur.	Thur.	Thur.	Thur.	Thur.	2	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 4.10	Geography
2	2	2	2	2	2	2	Fri.	Fri.	Fri.	Fri.	Fri.	Fri.	Fri.	2	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 4.10	Reading
3	3	3	3	3	3	3								2	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 4.10	Gardening

Gardening taught by an expert.
 Class 1 = Standards V, VII. Class 2 = Standards III, IV. Class 3 = Standards I, II.

TIME-TABLE OF A ONE-TEACHER SCHOOL FOR 60 BOYS

Upper Division : Sts. IV., V., VI., VII.

M	9 to 9.30	9.30 to 10.10	10.10 to 10.40	11.0 to 11.15	11.15 to 11.45	11.45 to 12.0	2.0 to 2.40	2.40 to 3.10	3.10 to 3.30	3.30 to 3.40	M
T	Scripture	Arithmetic	Reading	English	Interval	Composition	Registers closed	Drawing	Geography	Writing	Map Drawing
W						Drill		History	English (written)	Singing	Common Things, Lesson
T						Composition		Drawing	Geography	Writing	Map Drawing
F						Drill		History	English (written)	Singing	Common Things, Lesson
								Drawing	Geography	Writing	Singing

14 Boys go to Garden Class for one hour twice a week taught by a gardener.

Lower Division : Sts. I., II., III.

M	9 to 9.30	9.30 to 10.0	10.0 to 10.30	11.0 to 11.15	11.15 to 11.45	11.45 to 12.0	2.0 to 2.30	2.30 to 3.0	3.0 to 3.30	3.30 to 3.40	M
T	Scripture	English	Reading	Arithmetic	Interval	Drill	Obj. Les.	Arithmetic	English	History	History
W						Drawing	Singing	Geography	Transcrip.	Reading	Reading
T						Object Lesson	History	Transcrip.	English	Geography	Geography
F						Drill	Drawing	Geography	Transcrip.	History	History
						Transcription	Obj. Les.	Arithmetic	English	Singing	Singing

N.B.—A Time Table for a Combined Mixed and Infants School will be found in Chapter IV.

In the rural schools of north-west France the average number of pupils in a school with a single unaided teacher is about forty. Some such schools, however, have higher numbers. The law allows an additional teacher when the number of pupils exceeds fifty.¹

The Class as Unit in a Department.—If a department is to advance as a whole, unity of educational aim must find its expression in each class. Consistent method everywhere is essential to due progress. The teacher should be attached to that class in which his fullest powers are likely to be displayed. It is not only mere teaching ability that has to be weighed in this connection, but also disciplinary power, grasp of knowledge, and strength of personality. In other words, the teacher should fit the class and the class the teacher.

First, the teacher should fit the class in the official sense, that is, as understood by the Board of Education,² but this requirement, as explained, is more technical than real. He should also fit the class in the sense of aptitude. It often happens that these two by no means correspond. Officially, a class numbering sixty scholars is suitable for a certificated teacher. There is no doubt that this number is too high, under ordinary conditions, for efficient work. It is especially too high for the upper classes, for the lowest class, and also in cases in which two or more grades of scholars are grouped to form one class. But the Board of Education regulation does not differentiate in this way, probably because it is exceedingly difficult to make rules that will equally well apply to various, and sometimes varying, local circumstances. Generally speaking, however, forty scholars when there are two grades or standards

¹ See "Rural Schools of N.W. France." Special Reports. Vol. 7.

² Art. 12, Code 1910.

together, and thirty when there are three, should be regarded as a reasonable number for one certificated teacher.¹

It almost invariably happens that a class has several pupils in excess or short of the number that can be allotted to one teacher. In case of excess, it is necessary to draft the extra pupils to another class, or to give the teacher in question supplementary aid in the form of a pupil teacher, student teacher, or an uncertificated or certificated assistant; or, again, a sub-division could be formed for which either the student-teacher or the additional assistant could be held partially or wholly responsible. To allow teachers not fully qualified to be solely responsible is undesirable, not only on educational grounds, but because it throws a specific duty on the head to be in continual touch with the sub-division for purposes of direction and supervision, and this is not always possible.

If, on the other hand, the deficiency in numbers is small, it can generally be neglected; and if, again, the excess is small—one or two—it may be left out of consideration²: for natural adjustments will be sure to come, sooner or later, to the organiser's assistance.

The class being formed, other difficulties arise in the admission of new pupils and in the varying rates of progress. New pupils ought not to be allowed to retard a class unless the number of admissions is abnormally large and unavoidable. The thoughtful teacher will find the means of giving a few fresh scholars odds and ends of attention, which will in some measure compensate them for lost ground, without allowing the majority of the class to suffer. Admissions, however, are necessarily a slightly disturbing element, and the question arises whether it is

¹ But see Art. 14, Code 1910.

² Ibid.

not desirable to place some restrictions upon them, especially when the proposed change of school is due to caprice. This is done in many secondary schools. In Berlin and some parts of the United States admissions are only allowed twice a year. In the interests of migratory scholars themselves some restrictive rule is eminently desirable. The head teachers, with a recognised system of professional etiquette, might do much to mitigate the evil.

The other disturbing element, viz. the varying rate of progress, is the more difficult to deal with, considering the class as a whole. The normal rate in elementary schools is generally taken to correspond to the annual courses prescribed by the standards for scholars ranging between the ages of six and fourteen. It has been assumed that the average scholar could take these yearly steps, commencing with Standard I., at about six and a-half years, without undue pressure, and that those who fall behind would be counterbalanced in number by others above the average in ability, and therefore presumably capable of advancing more rapidly than the ordinary child. This assumption is not consonant with facts so far as some great areas are concerned, for the number of scholars who fall behind greatly outnumber those whose advance is beyond that of the yearly steps. Of course, this raises a question not only of national, but universal interest. It cannot, however, be considered here.

It is enough to say that what was hitherto regarded as a normal rate of progress has not been realised, and therefore it is as well to note that the limitations of the "normal rate" have not yet been fixed. But there seems to be little doubt that under the system which has been rampant in the recent past, and is still strongly in evidence in many county areas, the needs of the brighter scholars

have been sacrificed, to a great extent, either to the fetish of class advancement in unbroken line, or to the susceptibilities of class teachers, who sometimes regard terminal and occasional promotions as a serious break in the progress of their work. Each attitude deserves condemnation.

Departures from the normal are, of course, inevitable. Percentages on this point in one district will not necessarily correspond with those in another, because operating causes might be vastly different. The teacher, therefore, must not assume that what is possible in one county is equally possible in another. Over-pressure is, perhaps, more deadly than sluggish work. The means everywhere must not only be adjusted to the ends, but also to the individual: and in this respect the class teacher has shallows and depths to sound which must tax all his judgment, patience, and energy if real success is to attend his efforts. No faith ought to be placed in rules formed *a priori* in dealing with this question.¹

The head teacher must be prepared to find considerable divergence in the rate of progress of the scholars. The class teacher will find it necessary to adapt his pace to the class as a whole, and to see that every child advances in conformity with his general ability and his aptitude for study in any special direction.

Promotion.—The class has necessarily to be remodelled once in twelve months, that is at the end of the educational year. All or the great majority of the scholars are then

¹ In London Provided Schools for the year ending Lady Day, 1904, there were in boys', girls', and mixed departments 27 per cent. of the scholars in the normal stage, 7 per cent. above the normal, and about 65 per cent. below it. These percentages are based on the assumption that every child commences the work of Standard I. at six and a-half years. So that what was regarded as normal *a priori* was not found to be so in practice.

promoted to a higher class. A few perhaps have not advanced sufficiently to secure promotion at once. In many schools it is found practicable to promote a comparatively small number of scholars at the end of each of the two or three terms into which the educational year is divided. Such promotion is usually carried out on the basis of examination. This, however, is not a necessity. Promotion could be as efficiently brought about by the record of a term's individual work, supplemented, if considered desirable, by examination in one or more subjects.

(Most elementary schools have carried out their promotions annually. It would, however, be a mistake to accept this practice as a safe and proper guide. Indeed, under the existing freedom of classification allowed to teachers, it ought not to be rigidly applied to any school. There are now, happily, signs of awakening in many areas. A judicious combination of both yearly and term promotions is undoubtedly the best. A clever child who has reasonably well mastered the major part of the work of a class in four or six months ought not to be compelled to repeat that work *ad nauseam* to the end of the year. The effect of retention in the same class, under these circumstances, is mischievous in the extreme; for the child loses interest, the mainspring of attention and industry, and discontent and tedium result. The effects produced by this means often cling to a scholar for the rest of his school life.)

The chief objections urged against term promotions are (1) interruption to a steady and continuous year's work of the class teacher, (2) the doubtful advantage of promoting a child into a class that has already completed about one-half of the year's course, and (3) the dislike of the class teacher to have the best pupils removed. These are of minor importance, if they carry any weight at all, com-

pared with the deleterious influence on the child who is not allowed to go forward when he is reasonably fit to do so. (Of these three objections the first is more imaginary than real; the second is apparently strong at first sight, but it is really not so, for the work can be easily arranged on a terminal or half-yearly basis instead of on an annual one: besides, the clever child is found in practice to be able ultimately to overtake his class-fellows without undue strain; the third is admittedly disheartening to the teacher who takes a wrong-headed view of the position.)

[The errors of the past, and to a great extent of the present, are due to a very restricted vision. The form of curriculum has stood near, towered to the sky, and partially shut out the light of day, and the end has been taken for the means. Training has thus been eclipsed—the process that should be the *alpha* and *omega* of school work. If teachers and others had always accepted the curriculum as a mere instrument, to be used and adjusted to comparatively remote ends, there would have been no serious divergence from the true path.]

Again, if the smartest children are promoted to a higher class, equally intelligent scholars are promoted from a lower class to take their place—assuming, of course, that term promotions are general for the school—and though these cannot have the same attainments, yet they will, by natural ability, ever prevent the class becoming dull; and the class teacher should remember that it is his first duty to serve the best interests of his scholars, and should therefore subordinate himself to that duty. And he should further bear in mind a simple law—energy will escape, will discharge itself sooner or later. If blocked by any barrier, arbitrary or not, the impeded force will find an outlet elsewhere, in the direction of least resistance, and possibly therefore into undesirable channels. So it is with the

pupil who is unnecessarily retained in a class when fit to go forward.

(He needs a further field for his activities: his mental and emotional battery is at the discharging point; and if resistance is not removed there must be an outbreak, perhaps in unexpected quarters, or some injury may result to the pupil himself. Arrested development is not an uncommon complaint, and this is usually associated with those who fail to get the proper stimuli at the right time.)

These remarks apply, with some slight modifications, to the ordinary retarded scholar. At the end of the educational year every child in a class should be promoted, notwithstanding terminal advancement, unless there is overwhelming evidence to support retardation. Generally speaking, nothing in school life is so demoralising and so deadening to the faculties as retention of a scholar in the same class for two or more years. Interest almost vanishes, and self-respect and self-reliance become less and less acute, under such circumstances: and this position becomes all the more pronounced if the scholar is already old for his standard or class. "Hope deferred maketh the heart sick" has just as keen an application to the child as the man. If, however, there should be strong reasons for retardation, then the scholar should be encouraged to improve by the prospect of promotion at the end of three or six more months, or even at an earlier period.

As already stated (a judicious combination of both yearly and term promotions appears to be the best. In order, however, to carry out this effectively, some changes in the courses of instruction are necessary. The steps known as the standards are based upon a year's work for the ordinary child. The plan commonly adopted by the organiser is so to arrange the lessons that these steps or courses can be

completed in about eight or nine months, the remaining period of the year being spent in traversing the ground already covered, laying special stress on material points, making additions and emendations, and generally putting upon the whole work its finishing touches

This plan cannot be recommended: it bristles with defects. The organisation of a school should not be rigid, but kept to some extent in a fluid state. There are at least two better courses to adopt, either of which, according to circumstances, will be found to be a sound working basis.

In the first place it is suggested that the educational year be divided into two terms, each of six months' duration; and that the standard courses be divided into two parts in the ratio of about 2 to 1, or, perhaps better still, 5 to 2, the larger portion of the course being taken in the first six months,¹ and the smaller during the second together with such essential parts of the first term course as would make a reasonably graduated syllabus suited to the child a little above the average in ability, or with unusual powers of application. This arrangement, it is thought, would meet the needs of the ordinary scholar in the way of recapitulation, and would place the child drafted at the close of the first six months in a position nearly equal to the one possessed by the ordinary scholar at the commencement of the educational year, so far as the graduated syllabus is concerned.²

This would cure the defect, under some existing practices, of promoting children at the end of six months to a class that has already done two-thirds of the year's work, and is at the point of commencing the other third. The promoted pupil has then to take up the course at a point

¹ It would be well to complete the Arithmetic course during the first term.

² Generally *term* syllabuses, and not *annual* ones, should be applied.

in which some knowledge of what has been taught in the first half of the year is, if not essential, at least desirable to ensure satisfactory progress.

Even with the suggested two-term courses in operation, it would still be necessary to make the majority of the promotions at the close of the educational year; but the gain in being able fittingly to promote, at an earlier period, even a small percentage of the scholars, would be very great indeed.

Nothing said here is intended to encourage premature advancement of the child, which only leads to disastrous results in later life. A scholar's school career should be one of happiness, in which, however, intensive work should play an important part; and happiness is not consistent with either physical or mental strain. Only those children should therefore be promoted earlier than usual who can, without undue exertion, keep pace with the work. An ill-nourished child,¹ for example, although possessed of more than ordinary mental activity and power, ought rather to have its activities restrained than stimulated: and precocious children generally need careful vigilance to see they do not overtax their strength. The *whole* child is put into the teacher's keeping.

The Educational Commission of the City of Chicago² has recommended, *inter alia*, "That the course of study be so adjusted as readily to permit of at least semi-annual promotion from grade to grade."

Again, Section 247 of the Rules and Regulations of the Public Schools of the City of Boston reads: "The regular promotion of pupils from grade to grade shall be made in

¹ The Central Care Committee, working under the L.C.C., watch over and provide for the immediate needs of all ill-nourished and delicate children.

² See Report 1900. "Grade" roughly corresponds to "standard."

September and February. Promotion of individual pupils may be made at any time by the Principal of the district with the approval of the Supervisor in charge."

Age and Classification.—Something must be said concerning the bearing of age on classification and promotion. { As a rule moral and intellectual power in a child up to the age of seven is directly proportional to the number of its years. Age, therefore, ought to be and is a factor in classification and promotion in infant schools. It sometimes happens, however, that a scholar of twelve years is duller than a child of seven. }

(1) *Backward Scholars—Promotion.*—Generally children who are old for their class or standard have less ability than their fellows, assuming, of course, that a proper system of promotion has been in operation and that the backward pupils have had the benefit of ordinary educational facilities. { Such children, by constant association with others so much younger than themselves, tend to lose their self-respect, and thus become an obstacle to good discipline. They show this in many ways: there is a lack of industry, of interest, of tone, and, on the positive side, a decided tendency to be mischievous and troublesome. }

Hence everything should be done to rouse them to a proper sense of personal responsibility; and this can probably be best effected by promotion, within reasonable limits, to that class with which pupils of approximately equal ages are associated. Although such children will not fit the class in attainments, yet it will be generally found that they will learn, and improve, in other respects, at a comparatively greater rate than if associated with children much younger than themselves.

This has been found in many instances to work extremely well in practice; and it has a special application in the

case of those who are, say, within six months of leaving school altogether. If they fail to be brought into teaching and close social contact with one of the two highest classes in the school, their school life ends without even the sense, much less the acquisition, of that fine tone and moral responsibility that invariably characterise the two upper classes in any really good educational establishment. If, therefore, children of this type are not hopelessly remote, in attainments and mental grasp, from those of the upper classes, it is eminently desirable that they should be in close touch with those classes, if only intermittently, in such occasional lessons as are given in history, geography, Scripture, literature, and other subjects that lend themselves to oral instruction.)

(2) *The Ungraded Class*.—A special class for backward scholars—an ungraded or remove class—has been found very effective. This plan, however, is impracticable in some buildings, because of the limited number of rooms available: and it most often involves, too, the employment of an additional teacher. Generally speaking, the grouping of dull children for purposes of instruction is a bad practice. The justification, however, for such grouping lies (1) in its being a temporary expedient, (2) in the special method of teaching adopted, (3) in the small number of scholars forming the class—not, as a rule, more than twenty to thirty—and the consequent ability of the teacher to give a greater amount of individual attention than is possible under ordinary class conditions, and (4) in its efficacy in attaining the special end in view.

In some large departments an intermediate class consisting of backward children has proved very successful, the course of instruction ranging between Standards III. and IV., and all the teaching being essentially of a practical nature. Arithmetic is based on shopping, with scales and

measures ; history largely on dramatisation ; geography on modelling in clay and plasticine, and on visits to various places ; and handwork of various kinds plays an important part. Educational excursions, as encouraged by the Code, are also largely used.

(3) *Promotion on a One-subject Basis.*—A third successful method of appeal to the backward scholar lies in discovering his *strong point* as well as his weak ones.) It frequently happens that a dullard has a bias—possibly a gift—in a certain direction. Develop that line for all it is worth ; promote within that limit, to the highest class or place, and he will discover his balance and responsibility. Self-respect will be restored in glorified form ; and he will realise the possibilities of advance in other channels, having at least one high or comparatively high standard. All are acquainted with the energising influence of a fresh consciousness of power, even if that power lies within a small compass. Depths may be sounded by it that have never been touched before : and out of them may not unreasonably come, in time, an awakening force and a consequent development, that must broaden the avenues of life, ultimately confer an intellectual grasp of new realms, and thereby open a wider field for mental activity. A scholar might, therefore, be in the highest class for, say, drawing and in an intermediate or lower class still for other subjects.

The Highest Class.—In the highest class a phenomenon commonly arises which is very dispiriting to the teacher. As the scholars reach the age limit that cancels the legal obligation to attend school, they mostly avail themselves of the supposed freedom thus offered. This is especially the case in the poorer districts. The class, probably large at the commencement of the educational year, gradually

dwindles until towards the close of that year there is only a mere remnant left. If the staffing arrangements permit, it is best not to disturb the organisation, notwithstanding this quasi-hour-glass phenomenon. Sometimes, however, it becomes necessary to blend such a remnant class with another of similar character, with the result that a further loss of scholars ensues, besides a break in the continuity of the work and the necessity for some readjustments of the courses of instruction to meet the needs of the newly-combined class. The highest class, indeed, is often a most trying one on account of this leakage. One good pupil follows another into the world—the poor ones mostly remain, to justify the Scriptures—in a way that is most disheartening to the class teacher, who is naturally anxious that every scholar should have the full benefit of the school's highest course of instruction.

This leakage is educational waste—both an individual and a national loss, added to the dispiriting influence which the disintegrating process has upon all around. A keener public spirit in educational matters, and particularly a greater appreciation of the value of education on the part of the scholars' parents, would do much, in the absence of legislation on the point, to mitigate this evil. In Berlin,¹ where the legal upward age limit is the same as in this country, pupils who reach the age of fourteen during the educational year are not permitted to leave school until the expiry of that year. Thus the gradual breaking-up of the highest class is non-existent there.

Specialisation.—Previous discussion has shown how desirable it is that the class should fit the teacher, especially in respect of the upward limit of numbers. It does

¹ See Report of Mr. G. Andrew to the Scottish Education Department, 1904.

not follow from this condition that the teacher will fit the class. As in the industrial world the division of labour is found to be efficacious and specialisation valuable, so in school life there is a growing tendency towards specialisation in teaching. But before proceeding to discuss this developing feature of school work, there are one or two points of general interest concerning the fitting of the teacher to the class, which will form an appropriate introduction.

The organisation being settled on the basis of fitting the class to the teacher, it seems a simple matter, assuming there is no great variation in the numbers, to allow the teacher to follow his class as it rises higher and higher in the school. This plan of rotation finds its partial justification in the intimate knowledge which a teacher gains of his pupils; in the deeper interest he is likely to take in them through long association; and in the fixed moral impress he could impose, assisted by length of time. This principle of rotation, however, is not sound in *general* application. Applied exceptionally, that is, in cases where the teacher is strong in moral fibre, in tact, and in disciplinary power, it has many advantages. Generally it is open to the following objections:—

(1) The pupils' outlook is liable to become narrowed, they being only brought into teaching contact with one mind. (2) Although not equally capable of managing with thorough efficiency every class in a school, some teachers can manage the lower classes well, and the upper ones but indifferently. (3) The effect of a weak or indifferent teacher following his pupils throughout their school career would probably be disastrous to most of them. (4) The moral impress of a particular class teacher, though important, is certainly not the dominant one in a good school. Moral effect should rather depend on the

sum of the good influences that converge upon a school in its entirety.

In some parts of the ordinary school work it is evident that special aptitudes on the one side and special ability on the other are desirable in the staff, since they make for the highest efficiency. The powers and temperaments associated with a teacher of an infant school, for example, are not necessarily those required for the due instruction and governance of boys and girls in the senior departments, many of whom are in the pubescent period.

The division of most elementary schools into boys', girls', and infants' departments has roughly differentiated the teachers on the same lines. But teachers in the same department will, of course, be found to display differences in moral and intellectual force, differences in power of insight into character, differences in taste, temperament, and degree of knowledge, which the organiser must carefully consider before assigning to each a place. His chief aim would naturally be to put each teaching unit in that position in which it will be able to perform the most effective work.

But there are also other matters connected with this, to which wisdom should direct attention. Some variety of work is almost as essential to the teacher as the scholar. The interest of the teacher should not be lessened by keeping him year after year to the same standard or class, except it be to the highest class, for which often one member of the staff is specially fitted. A teacher's career might be seriously affected, and his usefulness not adequately applied, by a cabined experience. Some men and women, indeed, though ostensibly unsuitable for a particular class, will rise to the occasion in a most extraordinary way, if put to the test. Experiment therefore with the staff is allowable, within proper limitations,

especially when variety of work is deemed necessary or desirable.

Of course, cases will arise in which it becomes almost imperative to allocate particular classes or particular subjects to certain masters or mistresses specially qualified to deal with them. A point is reached in some subjects when it becomes necessary that the teacher should have a special knowledge, and sometimes a special aptitude joined thereto, beyond the general courses of instruction included in the Government Certificate Syllabus.

This is especially the case in practical science, art, manual training in wood and metal, domestic subjects (cooking, laundry, housewifery), and modern languages. The means employed in giving instruction in all these subjects, except the last, demand that not more than about twenty pupils¹ be allowed in one class. Practical science is taught in many educational areas by specialists, and in well equipped rooms designed for the purpose, in which every pupil has sufficient space and apparatus for independent experiment. Sometimes, however, the pupils work in twos—a practice that has much to commend it. Advanced drawing instruction is given under similar con-

¹ In the L.C.C. schools the number of scholars per teacher is limited to 18 in cooking, laundry, housewifery, and combined domestic subjects; 20 in woodwork, 16 in metal work. These numbers are practically the same as those recognised by the Board of Education, except that the size of the room occasionally makes it necessary to have a slightly smaller roll for the one teacher. For instruction in art, the general tendency has been to limit the number to 25. Most of the art rooms accommodate from 25 to 30. Similarly the practical science rooms generally accommodate about 24 pupils. The Board of Education, in a letter dated Dec. 11, 1901, stated that a class for practical science should not exceed 25, unless a second teacher is employed. This letter applied to a higher elementary school.

ditions in art rooms, which are sometimes used as centres by scholars of neighbouring schools: whilst instruction in wood and metal work and in the domestic arts is carried on wholly at specially equipped centres, each batch of scholars attending, as a rule, one session a week for each subject.

In all these subjects the skill of the specialist, the suitably equipped room, and individual instruction are generally recognised to be necessary. It would be impracticable, even if the regular class teacher possessed the special knowledge, for him to direct and supervise this practical work; for the numbers which form such classes are probably small compared with the ordinary class of which he is in daily charge. It must be noticed in connection with this that the dual demand for small classes and specialised teaching applies mostly to the older scholars in the school, usually those from 12 years of age upwards.¹

The importance of practical work in education cannot be overestimated. It has been well said by a distinguished American that "the hand is the projected brain," for knowledge acquired by its means becomes a *living* thing.

In lieu of girls' attendance at the domestic training centres one session a week for each subject they are studying there, which causes uncomfortable breaks in their ordinary school work, it would probably be better if each girl devoted the last six or twelve months of her school life exclusively to training in the domestic arts. There are, however, many administrative difficulties to surmount before this plan can be successfully applied. The general

¹ In the "special" schools (for mentally or physically defective children) similar principles are applied, however. By the Regulations of the Board of Education the average attendance for classes in these schools must not exceed 20, except in two classes, where the average may be 25.

practice is for girls to begin their domestic training at eleven years of age. Opportunities are thus afforded for applying and strengthening at home the knowledge acquired at each step.

There is of course no need of specialisation in the infant department. The "mothering" principle ought to find, and most often does find, its happiest expression there; for the care and training which the young child needs are just those which a devoted, cultured, and intelligent mother would give. Interest should run like a gold thread through the network of the social, physical, and mental training, based on the natural order of development of a child's body and mind, and therefore reasonably within the range of its potential activities. Indeed this principle should be applicable to all schools.

Departmental Teaching.—With regard to the senior departments, specialisation in subjects other than those already named is gradually growing into favour. The general practice is to have one teacher responsible for the whole of the subjects taught in one class, with perhaps exceptions here and there in favour of vocal music. In this country, and to a much larger extent in America, the practice is occasionally adopted of making each member of the staff, not responsible for a class as a whole, but responsible only for those subjects in each class which he is best fitted by knowledge and aptitude to teach. Whether this principle should be applied wholly to the senior departments in primary schools, or only to the upper classes, or whether it should find any justification at all, is a problem which can best be determined by experience. There is no doubt concerning the value of specialisation in secondary schools, especially in the higher forms. Local conditions and circumstances have always to be borne in mind.

The *complete* application of the principle has not usually

been a success. Applied, however, mostly to the upper classes, it might find its true position in the elementary school. Singing, nature study, and history are the additional subjects that demand a special knowledge and aptitude for really satisfactory treatment.

The advantages and disadvantages of this modified specialisation—*departmental teaching*, as it is called—may be briefly summarised thus:—The gains are, (1) A teacher's work is limited to instruction in subjects with which he is best acquainted and which presumably appeal most to his tastes. (2) Interest and special knowledge in the teacher ensure, as a rule, good method, zealous work, and breadth of treatment. (3) Scholars become more interested when facts are presented in bright colours rather than in sober greys. (4) The pupil has a better opportunity of finding his true bent. (5) Scholars are likely to get a more extended horizon by being brought daily into contact with several teachers. (6) The specialist can draw out a suitable course of instruction in his subject, for the whole school, graded to meet every stage in a pupil's advancement, which should operate independently of calendar or educational years.

On the other hand, the losses or disadvantages are,—(1) Diminution of moral control by the teachers because of the extended field of work; but when the sum of the influences of the school is great, this loss is more apparent than real. (2) Divided responsibility for a class as a whole. Even supposing one teacher is considered primarily responsible for registration, attendance, punctuality, stock, tone, and discipline on account of the larger share of time given to a particular class, still his influence cannot be so great as if he were in sole charge; and he may justly urge that discipline depends on many forces, for only some of which he is directly responsible. (3) Strain on the teachers

and little variety in the work. A more liberal staff, therefore, is generally necessary. With this staff, however, the strain would disappear. There is perhaps, too, ample scope for variety even in one subject—it depends on the person. (4) Scholars are more likely to take a special interest in one or more subjects to the neglect of the others. General knowledge and general training are, as a rule, desirable. (5) Teachers are not all qualified by tact or temperament to take every class in the school. This, however, would not be necessary in a large institution where there may be more than one teacher for each subject. (6) There is a possible danger, too, that each specialist will push his own subject to the detriment of others. The conflict of claims thus arising is a disturbing factor. (7) There is also a tendency in many specialists towards narrowness of vision, which can only be counteracted by a broad general culture.

A warning here appears to be necessary. The student should not be guided by the *number* of *pros* and *cons* in estimating the value of any device. One simple statement, say in favour of a scheme, may by its inherent worth carry more weight than twenty points against it. The true values lie in quality, in effectiveness, not in numbers.

Within certain limits, there seems to be no cause for doubt that *specialisation* is a most effective method for stimulating interest and activity. The possibilities of its service in training have not yet been fully realised, particularly in elementary schools. In addition to other subjects already taught at centres, drawing, music, nature study, history, English literature, modern languages, and science demand a precision and breadth of treatment which only the specialist can supply.

The lessons given by the ordinary class teacher in these subjects are often very unsatisfactory: they re-

semble in effects the poverty of the seed that lacks the vital principle of growth and development; whereas by the touch and revelation of an enthusiastic teacher who has a mastery of his subject, there are few parts of the curriculum that cannot be transformed into a series of fairy tales, the realities of which can hardly fail in their appeal.

Ungraded Room.—In many parts of the United States there is an ungraded room in each school for children unable to maintain their standing in the regular classroom.¹ This is a desirable innovation. An ungraded class should be in charge of a teacher of exceptional powers, since the children constituting it are, as a rule, those who by irregular attendance, mental sloth, unruliness of conduct, or other causes, have fallen considerably behind the ordinary scholars, or who need a special disciplinary régime. It has been already said that such a class should be small because individual attention is imperative. In many cases a few months' training, under conditions like these—the working basis being entirely on practical lines, including vivid presentation of fact—would enable a pupil to take his place in the regular class-room. It is important that assignment to an ungraded room should not be regarded either as a punishment to the scholar or a reproach to the parent.

Economical considerations often arise in connection with this device, since it generally involves the engagement of at least one additional teacher. In large departments it would probably be desirable to have two ungraded classes, one for the upper school and another for the lower. Into either of these classes, according to a rough estimate of capability, some newly-admitted scholars of doubtful

¹ Report of the Educational Commission of the City of Chicago, 1900.

capacity might be drafted until their attainments point to a definite place for them in the regular class system.

The Class-room.—It would be refreshing both to teachers and pupils if class-rooms could be made more interchangeable than they generally are. Difficulties, however, present themselves. The room might fit the class in that its accommodation may not be exceeded by the habitual attendance. Classes and class-rooms, however, often vary considerably in size. When, therefore, at the commencement of the educational year, the class has been adjusted to the room, it is not always practicable to effect even a temporary change without a breach of official regulations.¹ When, however, rooms and classes lend themselves to interchangeability, it would be well to make use of it as often as possible.

Another obstacle arises in connection with seating accommodation. It is evident that desks specially supplied for the older scholars are not equally suitable for the younger ones. The two lower classes might change rooms occasionally so far as *desks* are concerned—the intermediate classes might do the same, so might the upper standards. A third limitation to interchangeability comes in the way of general equipment, each room in this respect being supplied once a year, in accordance with the grade of the class assigned to it. On the whole, therefore, unless there is a spare room designed to meet general needs, class-rooms, except for a special purpose, may be regarded as not being readily interchangeable under present conditions.

It has unfortunately become the practice² in senior departments to cover the greater part of the floor space of

¹ Art. 19, Code 1910.

² Art. 20, Code 1910, and Section 6 of the Board of Education's Building Regulations for Elementary Schools.

class-rooms with heavy desks, movable or immovable. This arrangement places serious limitations upon the use of the room, which might otherwise be easily converted to purposes tending to give greater breadth and reality to school training. In the rigidity of this practice, in the absence of less restrictive regulations, and in the want of a supply of desks either easily removable or readily convertible to the needs of every pupil, lie the impossibility of obtaining that full freedom of movement which is so essential to physical development, and also the impracticability of utilising the rooms effectively for handicraft work. Nothing short of a revolution in ideas as to the nature of school furniture can bring about the change that is so much needed. However, matters must be accepted as they now stand, with the hope that such minor modifications as are deemed pressing may prove acceptable to Education Authorities.

Assuming that desks are necessary to *each* class-room—an assumption by no means admissible—is there any valid reason why desks with adjustable seats should not be supplied? If this could be done—and the classes and rooms were not very unequal in size and capacity—the rooms would thus be interchangeable. This in itself would be an immense gain, for even a little change of immediate environment, if not definitely for the worse, is stimulating. But the greatest advantage would result in the equipment of each room on a *subject basis*. There could, for example, be a room for history, another for geography, a third for science, a fourth for mathematics, and so on, when the school is large enough to admit of a separate subject differentiation. When the school is comparatively small, the rooms might be equipped on a *two-subject basis*.

Under easily possible conditions like these the monotony

of school life would perish and a recurring stimulus to activity would be kept in almost continuous operation.

A history room, for example, might contain charts, relief maps and globes, copies of old documents (*Magna Charta*), diagrams, ancient weapons and armour, historical pictures and photographs, models of various kinds—everything, in fine, tending to give realistic touches to the past and to bring the imagination to play upon it.

The School Hall.—The hall should not, except under stress of circumstances, be used as a regular class-room. In the winter months, and at other periods of the year when the weather is inclement, the use of the hall for drill is desirable. It may also be used for such silent lessons as needlework and model drawing,¹ provided the light is satisfactory. Of course there are other uses to which the hall may be legitimately applied, but it is only being considered now from the standpoint of class instruction.

The position of the hall in relation to the class-rooms is a qualifying factor in the uses to which it can be generally put. A hall, for example, with class-rooms opening into it, cannot be utilised for singing lessons—grouped classes or otherwise—without disturbing studies in adjoining rooms. On the other hand, if the hall is not in direct communication with class-rooms, the extension of its usefulness need only be limited by the time devoted to school work: and this extension is eminently desirable both on economical and educational grounds.

¹ Not desks but chairs, being easily portable, should be used for this purpose. In the case of drawing, no support is needed for the millboards or drawing boards beyond the lap-rest and the hold of the left hand. In this way, too, the scholar is brought into more sensitive contact with the paper on which he is recording his impressions.

The Class Teacher from the point of view of Organisation.—Some aspects of this question have already been incidentally discussed, but there are other points that demand attention. The grading of teachers recognised on the staff of a school by the Board of Education has recently undergone revision. The old Article 50 and Article 68 teachers are no longer so designated. Teachers are now graded thus:¹—

1. Head teachers.
2. Certificated teachers.²
3. Uncertificated teachers (the old Art. 50 teachers, etc.).³
4. Supplementary teachers (the old Art. 68 teachers, women only).⁴
5. Student teachers.⁵
6. Pupil teachers.⁶

The head teacher in many small schools, besides directive and supervisory duties, has necessarily to be a class teacher.

Some local education authorities recognise the position of head assistant in schools of abnormal size, and in mixed departments supervised by a master. In the former case, some of the minor duties which ordinarily devolve upon the head teacher are taken over by the head assistant; and in the latter case, the head assistant mistress generally becomes responsible for the supervision of the needlework throughout the school, and otherwise serves in an advisory capacity on the girls' side.

¹ Schedule I. and Art. 12 (*a*, *b*), Code 1910.

² Art. 12 and Schedule I. (A and B), Code 1910.

³ Art. 12 and Schedule I. (C), Code 1910.

⁴ Art. 12 and Schedule I. (D), Code 1910. Men are not now admissible; but if previously recognised, this recognition will not extend beyond the date on which their present recognition expires.

⁵ Art. 12 and Schedule II. (A and B), Code 1910.

⁶ Art. 11 (*a*), Code 1910.

Ceteris paribus, the class teachers should rank, in the mind of the organiser, in the order of seniority of service; but nothing should be allowed to interfere with the due recognition and full utilisation of special ability associated with a young member of the staff. It is advisable too that every newly appointed class teacher should be placed under probation during the first year of service.¹

The time which a teacher should give daily to his class must depend on circumstances. Generally that time coincides with the hours in which the school is in session; but it is manifest that, in the case of specialised lessons in the regular class-room, no teacher ought to be expected to teach continuously during the day. Some intermission is necessary both on grounds of efficiency and personal health—the time not employed in actual teaching being utilised in the examination and correction of pupils' exercises or in preparation of future lessons. In the case of the regular class teacher, there is generally sufficient variety in his work to give the desired relaxation, without the necessity for further change and rest.

But no teacher who makes a true estimate of his profession will regard the actual school hours as the fitting limitations to his labours. As the successful artist is absorbed by his art, or is a devotee to it, so the class teacher should show equal delight in and devotion to his work. Successful issues for both teacher and taught will then be assured.

Preparation of Lessons.—The teacher who desires to sustain the interest of his scholars must be interested himself. The interest on his part will keep him ever on the alert to add to his knowledge, and to give a new presen-

¹ The wisdom of this is fairly generally recognised by Education Authorities.

tation of facts. Preparation of lessons is therefore necessary. This can be best effected, as a rule, in the quietude of the home or the privacy of the study. No lesson however well prepared in the first instance, should be regarded as theoretically complete or technically perfect. Some variation ought to be introduced, in form, dress, or otherwise, each time it is repeated. The new element will be found to have a considerable vitalising power.

Whatever preparatory work is done, it should take permanent form in notes. These will be found useful to all concerned in the supervision of the school, and especially so as a guide and reference for the teacher himself. And as it is not always possible to bring within the scope of one lesson all that was intended to be included in it, it is advisable for the teacher to have at his disposal a large note-book in which he can record the name of the lesson given, with the date, and all the material points dealt with. It is a mistake to make elaborate notes. Let them be as brief as possible consistently with a clear mode of presentation. And while brief generalisation in this respect is commendable, it ought not to be so wide as to leave two or more deductions open in the mind of the head teacher or others as to the extent and direction of the lesson. The notes should be, in other words, almost as complete a guide to the expert who has not heard the lesson as to the teacher who gave it.

Correction of Class and Home Work.—The correction of class work is an ever recurring difficulty which the good teacher, however, always manages to surmount. It goes without saying that there is hardly any lesson, no matter how individualistic in application, in which scholars should be left entirely without controlling supervision and helpful guidance. It is, therefore, most undesirable, unless

a teacher can be relieved from teaching responsibilities for a short time—and this is the proper course—for him to correct such work in school hours when his full attention is needed for other purposes. But cases arise in which sessional correction appears imperative. Home lessons, for example, may need almost daily examination. The books containing those lessons are usually brought in the morning and carried home at the close of the afternoon session. Something, therefore, must be done to meet this and similar cases that demand prompt attention. Many teachers cut the Gordian knot by looking over these books during the two hours' dinner interval; but this does not meet the difficulty considered as a part of school organisation.

There remain, however, a few courses for adoption:—
(1) The preparation and reciting system as applied in the United States. (2) The partial employment of pupil teachers or student teachers for this purpose—to be resorted to within strict limitations, and only as a part of their training. (3) The Hall Scripture lesson by the head teacher once a week, which should for the time relieve some of the assistant teachers. This, however, is only, in part, a one-day remedy. (4) In certain exercises that assume a common form the scholars should be trained to correct their own work, especially when such correction is mechanical—a most valuable plan, if effectively carried out. (5) The combination of two or more classes for a lesson in vocal music, history, etc. (6) Silent reading and certain other exercises involving private study, which do not need close supervision. Much of the work of pupils does not necessarily call for correction at the desk. The teacher can therefore move about the class-room and be both supervising and examining papers. (7) The engagement of such a liberal staff as would enable the head teacher to organise on the basis of allowing each assistant

to stand off from actual teaching for, at least, one lesson or one hour every day.

Of these devices the first and the last are probably the best: they are certainly the most complete and efficacious.

But whatever course is adopted, the correction of exercises must be regarded as an important part of the work of a class teacher, who, if aided in the merely mechanical side of the examination of the papers, should assess the value of each exercise himself. Too much care cannot be taken in this direction. Careless marking will re-act on the scholars, and produce destructive effects. Indeed everything that the teacher does, in this and all other school matters, should be a model of neatness and accuracy: and further, the general assessment of the work should be determined by reference to a high standard that is perfectly defined in his own mind. Of the seven courses open to the teacher, (1) and (7) must depend partially on the education authority ultimately responsible for the school's efficiency: the remainder can be applied at the teacher's discretion according to circumstances. If, however, the class teacher is an enthusiast, he will find the means of doing all, or nearly all, the detail of correction himself, for such detail will give him an insight into each child's attainments and character, which he could not so surely obtain by any other means. The value of this knowledge is too evident to be indicated.

Athletics—Playground.—As the professional man's daily work will not admit of a rigid *time* interpretation, so it is with the class teacher, who should consider the school hours rather as a guide to, than a measure of, his labours—for duties external to the class-room are necessarily associated with his office. Not among the least of these are (1) playground supervision, (2) supervision of scholars

retained after school hours, (3) supervision of, or co-operation in, school athletics, represented by cricket, football, and other clubs.¹ The first and second of these, and sometimes the third also, are usually regarded as rota work. In practice, however, athletics are best left to the direction of one inspiring member of the staff, who takes a special interest therein. The playground has been happily called the "uncovered school." Teachers should, in turn, exercise supervision over it at reasonable times. During the recreation interval, every teacher's place is in the playground with his scholars, directing sometimes—the less of this direction the better—and occasionally taking part in their games. A touch of *camaraderie* with pupils assists in strengthening the moral tie between teacher and taught: it helps to individualise pupils in the way of clearer characterisation, without which knowledge real success in the management of children can never be achieved.

It is notorious that the playground brings out qualities in the pupil which may never be shown in the class-room. This alone, apart from other potent considerations, calls for the teacher's presence there.

Class Examinations.—In conformity with the practice in every good school, periodical examinations should be held by the head teacher, and a record of the results preserved. It is not a rare event on occasions like these, to find that a class teacher resents certain adverse criticisms which the head teacher feels it necessary to make, especially when such criticism is, as it should be, recorded in a book kept for that and other purposes. It is well to bear in mind in this connection that the head teacher is only assessing the value of work for which he himself is ultimately respon-

¹ See Article by Mr. G. Sharples, Special Reports, Vol. 22; also Report of the City Superintendent of New York, 1903.

sible, and that therefore, in all human probability, he is the last person likely to underestimate the worth of what has been accomplished, particularly as the record books and examination papers are accessible to all inspectors representing either the Board of Education or the Local Authority.

The attitude of the class teacher in matters of this kind should always be one of unqualified acceptance, never doubting for a moment the justice and truth of the head teacher's remarks. Indeed this mental attitude is essential not only to the well-being of the class but to the highest efficiency of the teacher. The criticisms in question are intended to serve the threefold purpose of estimating progress, indicating defects, and giving helpful hints for future guidance. The teacher's art is a most difficult one, and the class teacher can only become accomplished in this art by subordinating himself to the judgment of his chief much in the same spirit as a disciple follows his master. That this is so, experience shows by a multitude of examples. He who wishes to rise in his profession must not only accept unbiassed criticism of his work as if Truth herself had descended from her pedestal to give him a lesson, but he must be a more severe critic of himself, of his methods, ever undergoing self-examination, than any higher official could possibly be. Loyal acceptance of the head teacher's views on the examination and on all other questions that vitally concern the school is indispensable to easy working and successful issues.

When examinations are carried out two or three times a year by the head teacher, there does not appear to be any necessity for similar formal examinations by the class teacher. Indeed the latter should be so closely in touch with his pupils as to be able to estimate their progress mostly by means of their daily work.

It is the duty of the class teacher to preserve all records in connection with his class. Just as a regiment, a unit in military organisation, is proud of its deeds, so should a class, as the unit of the school, be mindful of its achievements. To this end, a record of successes should have a place on the class-room walls. In case of any tendency to fall away from the standards reached, or the ideals that have led in that direction, the wise teacher will use these records as a means of arresting depression, by calling attention to the responsibilities of the class and of every pupil associated with it. Pride of class should be a sentiment equally stimulating to teacher and scholar.

Class Discipline.—Although the personality of the head teacher should be the dominant factor in the tone and discipline of a school, which should always possess well-marked characteristics, yet the tone and discipline of each class have their own peculiar variations that are mainly dependent on the *personnel* of the class teacher. These variations should never be great; for they would be likely to disturb the balance of the school, the sensitiveness of which is one of the most subtle manifestations in school life. But the personal equation is inevitable in its effects, and must be considered.

There is, however, another element besides the personality of the teacher, that is not without its beneficial or perhaps its sinister influences. Every strong character among the scholars—indeed one might say every scholar, whether strong or not—unconsciously contributes something to the sum of the forces that determines the *vis agendi* of the class. Each pupil who voluntarily accepts the will of the school community and that of the teacher—these two should be, of course, coincident—as his own

is a valuable educational asset; this acceptance makes for stability, solidarity, and progress.

There are really therefore a multitude of elements in the school, and a thousand and one influences both within and without, that play their part even in *class* discipline. The dominant note is naturally struck by the head of the school;—and, speaking metaphorically, the assistant staff, each in his or her own way, have their notes, which must, however, be in harmony with the dominant one; while every scholar again strikes his personal note, which should, for perfect concord and easy working, blend harmoniously with those of the leaders. Tradition adds its undertones.

Each class should therefore be dominated by the tone of the whole school. Its own variations should be, so to speak, in the minor key, but so distinctive that the character and forcefulness of the class are easily recognisable.

It may be laid down as an inviolable law, that the leading ideas that govern the tone and discipline of a school as a whole should never be disturbed by the class teacher. He may add to them for his pupils' good, but on no account should he subtract from them. They should be accepted as the foundation upon which he desires to build. With these limitations, he has ample scope for the display of his talents, and the inductive powers of his character.

With the improved buildings of recent years, giving generally a separate room for each qualified assistant, the class teacher's training influence is likely to increase. It is, therefore, important that he should be acquainted with the essential principles that lead the way to the perfection of discipline—since these give the law that governs the school, and makes order, right conduct, and good work possible.

So far as the pupils are concerned, the tests of sound

class discipline are (1) prompt and willing obedience, (2) close application, (3) pleasure in giving satisfaction to the teacher, (4) eagerness to answer questions combined with thoughtful answering, (5) good manners and right conduct generally, (6) thoroughness in work, (7) good order without unnecessary physical or mental restraint, (8) collective and individual self-control.

On the other hand, the class teacher, in order to assist in creating these qualities and also to maintain them, should be—

(1) *Able to adjust himself to his class.* Age of the scholars is a great consideration in this matter. Sex and social position also come in as determinants.

(2) *Sincere and therefore natural.* It is next to impossible to convince otherwise. Armour of any kind is useless. The scholars will see it at once.

(3) *Patient and sympathetic.* Sympathy is the key to his perfect mastery over the scholars: the best road to the head is through the heart, and "patience lies at the root of all pleasures as well as of all powers."¹

(4) *Enthusiastic.* The zealous teacher loses himself in his scholars. His "work is like the living seed thrown into the ground; it germinates and brings forth harvests."²

(5) *Quick in decision.* Children intuitively measure a teacher's strength, and any indecision on his part will be felt by the scholars instantaneously. The teacher, therefore, ought never to be in doubt as to the right course of action. A firm but kindly exercise of power calls forth a child's respect.

(6) *True to his own commands.* It is, as a rule, a mistake to repeat an order. It is better to watch and wait until it has been fully obeyed, naming an individual or individuals if necessary. Nothing is more fatal to discipline than to

¹ Ruskin.

² *The Simple Life*, C. Wagner.

allow one act of disobedience to pass—even when that act is only one of omission.

(7) *Careful to husband the voice.* Loudness of speech defeats its own object, and causes a waste of energy that could be best utilised in other ways. Shouting or noisy demonstration of any kind creates a bad impression. The voice of persuasion is always natural and gentle. The teacher's eyes will aid the voice if they are used to cover the class. "Grace is economy of force"¹; this applies equally to spiritual grace.

(8) *Careful to sustain the children's interest.* Every step ought to be one of progress and the scholars should be made to feel it. Short periods of intense study are generally more valuable and interesting than longer periods, into which monotony is almost sure to creep. Generally, "pleasure heightens and retards the pulse; displeasure weakens and accelerates it."² A child will exhaust much more nervous energy in the performance of a task in which he takes no interest, than in a corresponding one in which his interest is excited.

(9) *Just³ and tactful.* Praise of good work or worthy conduct is valuable. Blame, on the other hand, should be used sparingly. The children must, however, feel that the teacher, above all, is just, or they will have but little respect either for his praise or his condemnation. A pupil once spoke of Dr. Temple (when at Rugby) as "a beast, but a just beast." Tact is an every-day wisdom.

¹ H. Spencer.

² *Psychology and Crime*, p. 128, Prof. Münsterberg.

³ "The eye of the passing child will not greet you with the same unapproachable smile if there lurk within you an evil thought, an injustice, or a brother's tears."—*The Treasure of the Humble*, M. Maeterlinck.

(10) *Definite in aim and consistent in demands*, always busy himself and always aiming at a high standard.

“High endeavours are an inward light.”

Abundant energy at one time and slackness at another, with corresponding demands upon the scholars, are mischievous in their tendencies.

(11) *Mindful that discipline is not an end, but a means to “complete living.”* If the essential is always in the forefront, the accessories will take care of themselves.

(12) *Firm, self-reliant, and possessed of self-control.* It is important that the scholars should understand that within the class-room lies the power of complete government. The head teacher's authority ought only to be invoked in disciplinary measures on exceptionally trying occasions. “If you achieve calmness and harmony in your own person . . . a wave of imitation will spread from you, as surely as the circles spread outward when a stone is dropped into a lake.”¹

(13) *Careful to avoid punishment*, if possible. “The instruments of reformation are employment and reward—not punishment.”² This dictum is, however, only a half-truth and should be accepted as such.

“Small punishments are simply irritating, and it is far better to give several warnings and then come down with all your might. . . . On the few occasions, when I should have liked to cane a boy, I have never regretted that I was unable to do so.”³

(14) *Attentive to the scholars' physical and mental comfort.* The desk should fit the child. Indeed, general hygienic conditions are essential. These points are, however, dealt with elsewhere. A child in a state of fear is wasting its vital forces.

¹ Prof. James. ² Ruskin. ³ *The Schoolmaster*, A. C. Benson.

(15) *Always willing to give reasonable scope for individual expression.* Without full self-expression the teacher is working to some extent in the dark; it is the mainspring of development. "Human nature obeys fixed laws no less than the figures of geometry."¹ Liberty must be respected, but curbed if it goes beyond its true limits. That kind of order and discipline need only be secured which is essential to good work and careful training.

It avails little to tell children to be good: they must be *led* in that direction, and have actual experience of what *good* means. One of the surest ways into the heart of a child is to associate oneself with activities that call forth some of the happiest moments of its life. The value of athletics in this way has already been touched upon. Class rambles in town, field, and forest have equally been proved to be a most valuable aid to good discipline.

It will be seen from this brief reference to *class discipline* how important is the personality of the teacher. Through him the law of the school mostly speaks, and that law will be operative and effective in proportion to his own strength. His duty is not fulfilled by a strict attention to the courses of instruction assigned to the class, nor by exacting prompt obedience to commands, but rather by keeping constantly in mind the final end which the school has in view for each of its pupils, adjusting² himself and his methods to that end, and using his utmost endeavours at all times to draw out from the children that habitual and voluntary submission to regulations upon the willing and reasonable observance of which the highest efficiency of the class and school depends. If he is strong, his strength will permeate the class—reach the heart of it—and make itself felt throughout the school; if he is weak, there will be correspondingly depressing effects. The teacher must

¹ Spinoza's "Tractatus."

endeavour to reach each scholar in turn—to understand his character, to breathe into him the ideals that govern his own life. Indeed the teacher needs a many-sided power to be able to accomplish this.¹

The impressiveness of an appeal to a class may often be great, but the gentle voice of persuasion and intense conviction, addressed solely to an individual, will frequently stir depths that could not otherwise be reached. The knowledge, too, in a child that he is understood is both a sweetening and an energising influence.

To summarise, the fundamental principles and conditions—assuming the law of the school is sound—that must operate or subsist in a class-room in order to secure good discipline there are:—

(1) The general conditions must be such as to facilitate the work the pupils are called upon to do; and this work must be reasonably within the range of each child's attainments and powers.

(2) The teacher must be able to adjust himself to the class and its needs, and to influence for good every scholar in it.

(3) The laws of the school, of which the teacher must be the recognised exponent and administrator, must be paramount.

(4) While the corporate spirit of the whole school must prevail, the class should have its own *vis agendi* and full sense of responsibility.

(5) Each pupil must recognise his obligations to the school as a whole, and to his own class in particular.

(6) The teacher's mind must be firmly set on training

¹ The difficulties perhaps will be more fully realised when it is understood that "to educate a child you must begin back with his grandfather."—*Vide H. Spencer's Education and Galton's Law of Ancestral Inheritance.*

the scholars in self-control; and as this self-control increases in power, the reins of government must be proportionately slackened.

(7) Mere class routine must become automatic.

(8) Intense work is the main road to the ideal of duty.

Class Registration.—This demands great care, especially because it is one of the conditions upon which grants are paid by the Board of Education. Registration should be carried out in strict conformity with the Regulations.¹ As a rule, the value of a class teacher can be roughly estimated by an examination of the class register. If it is kept neatly, accurately, and fully entered up to date, it implies attention to detail, and this lies at the root of all success: if it shows that the scholars are more than usually punctual and regular in their attendance, this is, *prima facie*, due to the class teacher's influence. Indeed there is none of the teacher's duties which is more important than that of forming habits of punctuality and regularity, since these are not only an immediately valuable asset to the pupil and the school, but are likely to continue with him as a law of life to the end of his existence.

Registration generally is dealt with in the chapter on "school records."

Class Excursions.—Visits of the class to "places of educational value or interest"² as allowed by the Code, during school hours, should be encouraged. Enterprise in this direction is generally appreciated by head teachers, who must, in the first instance, sanction such visits, and

¹ The Board "strongly impress upon all concerned in the keeping or checking of School Registers the *rital importance* of this work."
—Prof. Memorandum, par. 15, Code 1910. See also Art. 48 and Schedule IV., *ibid*.

² Art. 44 (b), Code 1910.

then obtain permission from H.M. Inspector. When visits of this kind are projected, it is advisable to put the scholars beforehand in possession of the important facts concerning the objective, in order that the greatest educational value may be derived from the outing. An effective way of doing this is to give one or more lessons on the place to be visited, and to summarise material points in a multi-graphed leaflet, a copy of which is supplied to each scholar. Maps or plans of the localities to be visited are very valuable. The scholars should not only be expected to *observe* during these visits, but to record their impressions in a notebook under definite and pre-arranged headings, afterwards amplified in composition exercises.

The teacher should, of course, be fully prepared on these occasions to make the best use of the time available, his plan of operation being already mapped out and recorded in a book kept for that purpose. The value of these visits will be chiefly determined, not by the amount of ground covered, but by the thoroughness with which everything attempted has been done. When the courses of instruction for a term have been settled, it is well to determine then the number and character of the visits to fit those courses.

Conferences.—In conferences of the school staff the class teacher should take an eager interest. It is advisable to hold these conferences at least quarterly or terminally, preferably once a month. Presided over by a sympathetic head, always open to new ideas and fresh convictions, they generally prove a great gain to the school and a source of enlightenment to each member of the staff. On these occasions each teacher should, as a rule, contribute something for discussion, and thus have difficulties threshed out and ways cleared for more rapid and certain progress. Such conferences have been found to

encourage experiment and to stimulate initiative; and they therefore materially assist in maintaining that living interest in the teachers which has been already insisted upon as essential to the interest of the scholar and the general welfare of the school. Any subject that concerns the theory and practice of education is a fitting topic for discussion on these occasions, provided it has a definite bearing on the particular school.

Pedagogy in this country has too long been regarded as a known art rather than one possessing grave difficulties and almost unfathomable depths. The theory of education involves, as Mazzini has said, the problem of human nature. No person could desire a wider field for the exercise of thought and the practice of research. No class teacher, therefore, need feel that his profession is a dull one.

In France conferences pass beyond the school and take Cantonal or Departmental form. All teachers in the area are obliged to attend the conferences, held, as a rule, twice a year, and to send in advance a contribution for discussion, either in the form of a thesis or general impressions in the shape of notes.¹

Sex of the Class Teacher.—The points to consider in class management are almost endless. This chapter, however, must be concluded under the above heading. The German view is on the side of the employment of men in certain positions which, in this country, are considered to be best filled by women. The American practice, on the other hand, goes to the other extreme, and gives largely into the hands of women teachers the education of the boys.

¹ See *Inspection de l'enseignement primaire*, 1900, which bears testimony to the value of these conferences. The L.C.C. also holds an annual conference of teachers to discuss pedagogical questions.

In England a middle course between these two has generally been followed, and thus the employment of women has been mainly limited to mixed, girls', and infants' departments, as well as "special" schools.

It has, however, been long felt that the change from the methods and environment of the infant department to the more rigid discipline and severer atmosphere of the senior schools is too great for young children, and that it makes in the direction of retardation. Experience points to the advantage of having women teachers for Standard I. in the boys' department, and probably for Standard II. also. Instances in which women teachers have had exclusive charge of boys' classes above Standard II. generally tend to prove that the combination is not quite satisfactory. In some mixed departments, however, where the girls exercise a chastening influence over the boys, women class teachers have been successful even in the upper classes. Yet there is little doubt that the elder boys are the better for being taught and guided by a master.

But this question involves deeper issues than those that lie on or near the surface. Women are eminently fitted to train young children of either sex: they have a natural bent for this kind of work. The spirit of childhood unfortunately forsakes the great majority of men; whereas woman, to a large extent, subtly weaves it into the texture of her life with wonderful effect. She still sees the world, as in a vision, "apparelled in celestial light," and brings the refining influence of her soul power to bear upon her educational work. But the time comes in a boy's life, usually about the age of ten, when he silently, and perhaps sullenly, resents her government. The forces calling to him from within will not be denied: his development depends largely on obedience to this call. His whole nature demands a wider field for movement and mental

flight, and less detail in restriction. He is conscious of his growth, of his development—conscious that he is getting big and important.

The conclusion is that stronger forces are needed to restrain and to guide him, perhaps to be less often applied than the smaller ones. The woman, no matter how admirable, with her microscopic vision, love of detail and of self-sacrifice, cannot effectively meet this want; but the more selfish and more assertive man can. The typical boy's idea of order is as remote from the woman's as the two poles. He despises detail in these matters: he pins his faith to *wholes*.

All will admit that training must take strict account of nature's laws; and the ultimate object of this training is to make strong men and inspiring women. Nature has differentiated the sexes mentally and emotionally as well as physically—each is the complement of the other in these respects. The boy needs those manly influences, those restraints and standards of action which a capable master can alone supply. He further needs a model on which to build his own life and to satisfy his instinctive craving to admire and revere something in the flesh: but it must be something that appeals to the boyish mind—something to aim at for himself. Can anyone doubt, therefore, that a master—and not a mistress—with the living standard of manhood in him, conscious of the rights and needs of the older boys, able, to a large extent, to feel with them, and to enter into the spirit of their lives—occasionally even as a comrade—is the most fitting person to train them for life and action?

CHAPTER III.

"We see most distinctly the vice of our educational system. It neglects the plant for the sake of the flower. In anxiety for elegance, it forgets substance."—H. SPENCER's *Education*.

THE SCHOOL AND ITS DIVISIONS.

School Departments.—Most elementary schools, *provided* and *non-provided*, are organised in three departments, for boys, girls, and infants, the basis of separation being chiefly sex and age. In Scotland, however, mixed schools prevail, and in the north of England this type of organisation is fairly common. The infants' school is invariably *mixed*, and the line of separation between it and the senior departments is one mostly of age, though poverty of attainments occasionally prevents promotion to the senior departments at the age generally required for this purpose.¹ Roughly speaking, the senior departments are limited to

¹ "The age at which a child should cease to be taught as an infant depends upon the child's proficiency and upon many local circumstances. The premature promotion of children who are in age or attainments unfitted for it is greatly to be deprecated; but the retention of children whose age much exceeds that at which, on the average, a child leaves the infants' school is inadvisable, even though they are backward. Such children require stricter discipline and longer lessons . . . and are 'not fit companions' for infants 'in the playground,' etc."—*Board of Education's Suggestions*.

"An *infant* means a scholar under the age of eight years, and an *infant class* means a class in which the majority of the scholars are under the age of eight years."—*Pref. Memorandum*, par. 9, Code 1910.

scholars between seven and fifteen years of age,¹ and the infants' school to children between the ages of three and eight.²

Although the organisations indicated represent the general trend in different parts of the country, several other ways of organising schools find expression in most wide educational areas, some arising from a desire of experiment, others from profound conviction, and others again from economical considerations. Thus it is that about seven or eight different organisations are to be found in all, so far as the ordinary primary school is concerned:—

- (1) Boys', girls', and infants' departments—three departments.
- (2) Senior boys', senior girls', junior mixed, and infants' departments—four departments.
- (3) Senior mixed, junior mixed, and infants' departments—three departments.
- (4) Mixed and infants' departments—two departments.
- (5) Boys'; girls and infants³ forming a combined department—two departments.

¹ A scholar on attaining the age of fifteen years should have his name removed from the ordinary class register, as no fee grant is claimable for him after that time, except as provided for under Section 22 (2) of the Act of 1902. He may, however, continue to receive instruction in the school until the close of the educational year in which he reaches the age of fifteen.—Art. 43 (a), Code 1910. "Two registers" are therefore "required for every class which contains scholars who are respectively above and below the age of fifteen years."—*Pref. Memorandum*, Code 1905.

² The law of compulsory attendance operates at five years of age. Local Education Authorities may refuse to admit children under the age of five years.—Art. 53 (c).

³ In all these cases the infants must form a division, which may consist of one or more classes, and be taught separately.

- (6) Senior mixed; junior mixed and infants¹ forming a combined department—two departments.
- (7) Boys, girls, and infants,¹ forming one department, usually small.

There are also *dual* schools or dual departments: these, under one head teacher, consist of boys and girls who are arranged into classes on the sex basis—*i.e.* separate classes for boys and girls respectively. Indeed, this arrangement is not uncommon in some *mixed* schools, where the lower classes conform to the designation of the school, but the upper, or some, classes are differentiated on sex lines. It is often convenient to classify thus when there are sufficient boys and girls of approximately equal attainments to form two or more classes on the separation basis.

Each department has its own head teacher as a rule. In Scotland one pedagogic head usually directs all departments of a school. In the United States the practice is to have superintendents, each of whom organises and supervises a group of schools or those of a whole city, with the aid of a supervisor or principal over each institution.

The junior mixed departments vary in range from Standards I. to II., I. to III., or I. to IV.

In a school department children are grouped together according to attainments in classes varying from twenty to about sixty, the age of a child being sometimes a factor in this classification. Though it is generally found that the majority of the children in a standard or class are approximately of the same age, yet age ought not to form the basis for classification, except in infant schools, and even there it is sometimes desirable to make exceptions.

¹ In all these cases the infants must form a division, which may consist of one or more classes, and be taught separately.

Necessity for Differentiating between Infancy and Childhood.—The necessity for differentiation in the educational treatment of infancy and childhood is based on an every-day knowledge of children and on scientific data furnished by physiology and psychology. The infant of three years differs so much from the infant of five, and the infant of five from the child of seven, that *specially* graduated instruction is necessary. The four years intervening between three and seven represent a much greater difference in the rate of physical growth than the four succeeding years, and this is especially true of cerebral growth.

The brain of the normal child, according to Bain, grows with rapidity till the seventh year. After that time the growing process is slower. It is assumed that in the normally healthy child growth carries with it development, or the conditions that make for development. It is desirable, when cerebral growth¹ is taking place at such a rapid rate in infancy, and putting, therefore, the child's whole system to a severe test, that the greatest care should be exercised by those responsible for the child's training. During all periods of rapid growth the bodily organs become weakened: and the brain is as much a part of the physical organism as the hand. Most of the vital energies are then needed for the labour of supplying increased material to the body. If, therefore, the brain be stimulated into activities during the period of diminished strength arising from this rapid growth, and these activities severely tax the child's powers, effects inimical to health are produced. Diseases "are often to be traced back to an intemperate exercise of the brain functions

¹ "Rapid growth should be accompanied, or quickly followed, by a corresponding change in development."—*Fundamentals of Child Study*.

in both physical and motor regions during the earlier periods of development, when the greatest care and moderation are necessary."¹

Again, "The earlier the imperfectly developed central nervous system is subjected to a strain in a one-sided manner, or even in a manifold activity, so much the earlier does it become dulled, and so much the less plasticity it retains for later use."² Professor Kirkpatrick also states, "It is altogether probable that in giving children the training they will need in later life, at a time when they are in an earlier stage of development, we are, to a considerable extent, interfering with their natural order of development."³

Experience shows that mental exercises can be easily mastered by children over seven years of age which would be altogether out of place at an earlier age. This has a special application to such abstract subjects as grammar and arithmetic. Formal reading, again, should not be taught to children under six years of age. Several reasons may be advanced in support of this view; one of these, however, must suffice here, viz. the *long sight*, of young children.

A very close parallelism exists between physical and mental development. If growth is not to be retarded and development impaired, the young child must have a varying diet suited to its bodily needs as it passes through the various stages of development. Absence of proper nutrition, improper or over feeding, are certain to lead to serious organic consequences later: so it is with the brain. Over-stimulation, or failure to apply the right stimuli when needed, produces corresponding mental effects. Inner tendencies must be responded to at the right

¹ Dr. T. B. Hyslop, *The Clinical Journal*, Dec. 7, 1904.

² See *Mental Development in the Child*, by W. Preyer.

³ See *Fundamentals of Child Study*.

times if natural development is to result. The difficulty lies in knowing exactly what kind of stimuli to apply and when to apply them, so far as brain building is concerned. The natural tendencies of the child must be the chief guide. Psychology is not yet sufficiently advanced to be able to state this in exact terms; but the knowledge that has been acquired in this direction will be found most useful, especially when added to the close observations of the teacher in the class-room. It is known, for example, that plasticity reaches its highest point in early life. This, then, is the fittest time to correct impressions, to form good habits and to lay the foundations of character. It is also known that the basis of mental power is both sensory and motor activity, and that *will* development depends mainly on motor ideas or ideas of movement.¹ These, then, are three fundamental principles for guidance in the instruction of infants.

A young child on entering into infant school life is generally rich in simple ideas. His whole environment is an endless source of knowledge. Comenius asks, "Are we not placed in Nature's garden? Why not turn over the living book of the world instead of old papers?" Before, therefore, attempting to take the child outside his immediate surroundings, and thus, as Froebel says, "damming up the springs of life," he should be guided to a fuller understanding and appreciation of that which has come within the range of his own experience; for in this understanding and appreciation lies the essence of all true education. The teacher should bear in mind, too, that "all speech is in a dead language until it finds a *willing and prepared* hearer."²

¹ But see the chapter on *Will* in *Principles of Psychology*, by Prof. James.

² R. L. Stevenson.

The acquirement of clear definite simple ideas is the first necessary step in sound mental development. These are the material with which the young brain works. If it is faulty, that which grows out of it will be faulty also. "There can be no system, no order, no relationship, without clearness in single things."¹ If ideas already acquired are not clear and definite, it is the teacher's duty to endeavour to make them so, and to create opportunities for fresh perceptions. The next step involves close observation, the noting of different and common qualities in various objects. Discrimination is the beginning of mind. Immediately a difference is self-noted or a relationship self-established thought is born. The third step consists in expression. This may of course take various forms—in speech, in gesture, or in other movements involving a wide range of co-ordination. These three stages are essential to brain building or cerebral development. They correspond with the *general* order of the educative process, viz. (1) observation, (2) thinking, (3) application. In this series, however, *observation* implies a stock of ideas, and *thinking* connotes the higher forms of thought, including logical reasoning.

With elaboration, these processes give a field wide enough without the introduction of unnecessary abstractions. Some abstraction is, of necessity, involved. Trained in this way on the basis of self-discovery, and on the principle of *things before words*, a child is certain to make greater progress in the ordinary subjects of instruction that have to be faced later, and to be more capable of independent mental effort, than when the elements of the three R's are prematurely introduced or unwisely applied.

The question arises as to ways and means. There is some divergence of opinion on this point. Pestalozzi, Froebel, Herbart, and a multitude of others, however,

¹ Herbart.

briefly give the answer, with Froebel's voice resounding above the rest. The "gifts" and "occupations," or the application of the principles underlying them, should be the chief means—in other words, play and games on an organised educational basis. These tend to satisfy curiosity, the greatest force in intellectual development, and they respond to the natural desire for social intercourse. Play¹ is the preparatory school for what has to be accomplished later in the form of work. It teaches reverence for law, exercises the imagination, gives opportunities for frequent change—without which attention in young children cannot be sustained—and creates little difficulties to be surmounted. Indeed, play and games, without difficulties, would not be appreciated. It is claimed for these, rightly applied, that they are a means of training the senses, directing the instincts, cultivating the tastes, exciting thought, and using the emotions to brace the will and thereby form character.

"School games involve a wide range of brain activity. Most of the senses are called into action. Comparison and judgment are needed."² This statement was made concerning school sports, but it applies almost equally here.

The best advice that could be offered to an infants' teacher would be *to make full^o use of the instincts of her scholars*, since these are given for the protection and development of the organism, and lie at the root of all *attention* in its simplest forms. From instincts spring knowledge, emotion, and action. They are the basis of all mental life and of all human activity.³

¹ "During the first five years a child's activities belong almost wholly to the kind called play."—*Fundamentals of Child Study*.

² Sir William Gowers. *The Clinical Journal*, Dec. 7, 1904.

³ See *Social Psychology*, Wm. McDougall.

Remote ends cannot be kept in view by young children. Such ends therefore fail to stimulate them; but on the other hand *immediate ends* are stimuli, and instinctive movements are designed to reach them. And as every instinct has a corresponding emotion, each with its own peculiarity of expression, the young child presents a wide field for the play of the teacher's skill, without passing beyond the limits defined by the child's natural order of development, and the means to be adopted to preserve that order and to further that development.

The following principles and additional points demand special attention in connection with the training of infants:—

(1) Frequent change and variety of work are essential to the maintenance of the child's interest; and interest should be the teacher's watchword.'

(2) Change of activity being non-recuperative, some rest between each lesson is desirable.

(3) Every perception and every emotion tend to express themselves in movement. To check or repress the expression of these tendencies is to arrest or retard development.

(4) A time unit of activity will normally produce three times as much fatigue in the afternoon as in the morning.

(5) The younger the child, the more susceptible it is to injury. Each organ has its own mode and time of functioning. Exercise of organs is the nourishment of them. The harmony of the organism must, as far as possible, be preserved. If the muscles are unduly exercised, the brain will suffer; it cannot respond adequately to the demands made upon it. If on the other hand the brain is overstimulated, nutriment will be largely drawn there, to the impoverishment of other parts of the system.

(6) To exercise a power once acquired is far easier and

much less expensive than to build up a new acquirement. Every new acquirement means a series of nervous growths and the establishment of a number of beaten tracks in the cerebral substance.¹ This is in accord with the physiological law—the tendency for nervous energy to take the same cerebral course as before. Hence the need for careful differentiation of time in new exercises, and hence also the child's liking for repetition—for going over beaten tracks.

(7) "Most instincts are implanted for the sake of giving rise to habits. This purpose once accomplished, the instincts themselves, as such, have no *raison d'être* in the psychical economy, and consequently fade away."²

(8) "All acquisitions have for their roots inner tendencies, and all inner tendencies remain undeveloped or develop slowly, without the action of favourable outer influences."³

(9) "Detailed analyses and exact definitions, so often required of young children, are opposed to the natural order of brain development and therefore destructive of interest, and disturbing to the natural processes of mental growth."³

(10) "Imagination usually reaches its climax in the fifth and sixth years."³

(11) Unless the *lower centres* of the brain are functioned at the proper time, and this depends mostly on motor activity in which the larger muscles play an important part, the higher centres upon which intellectuality depends have their growth impoverished and their development impaired.

(12) The instincts that should have a dominant place in infant education are those of play, curiosity, emula-

¹ See Bain's *Education as a Science*.

² *Principles of Psychology*, W. James.

³ *Fundamentals of Child Study*, Kirkpatrick.

tion, construction, imitation, and the rhythmic, social, and moral instincts.

(13) Infant school life should be devoted almost wholly to the mother tongue, nature work, and physical culture. Music is included in language.

The Pubescent Period.¹—From investigations made by the Child Study Department of Chicago, it appears that the pubescent age represents the period of greatest extremes in height, weight, grip and vital capacity. It is a critical age physically and mentally, because it represents another period of rapid growth. If at this time the vital energies are mainly directed to the brain, the other organs of the body may become impoverished, and consequently improperly or imperfectly developed. Relaxation of ordinary work does not appear to be absolutely necessary, but overstrain of any kind at this period is likely to be attended with more serious consequences than at other times. Health is dependent on equilibrium in all parts of the organism.

Size of Departments.—What should be the size of a school department in relation to directive and supervisory power is a question essentially administrative. It has recently been laid down by the Board of Education that new schools should not, as a rule, exceed 1,200 in accommodation, that is, roughly, 400 in each department. In Berlin the accommodation of a department often ranges from 700 to 1000. In the United States, again, particularly in New York, and also in the north of England, there are schools with about 2000 scholars supervised by one head. Looking at this question from the purely educational standpoint, it cannot be denied that a sound knowledge

¹ See *Adolescence*, Dr. Stanley Hall.

of the chief characteristics of each pupil on the part of the head teacher would be of the utmost value. This knowledge can, of course, be best obtained when the area of supervision is comparatively small. Scholars in primary schools do not always possess those home advantages in general education which pupils in secondary schools generally have. Frequent opportunities for personal contact of the head with individual scholars are desirable, too, on general grounds. Caesar, it is said, could call every soldier in his legions by name.

On the other hand, the larger the school the greater, as a rule, is the facility for perfect organisation, especially sound classification; it further gives each scholar a wider field in human experience, though there is a tendency for him to be lost in the crowd: and assuming that the remuneration of the head is proportional to the size of the school, a teacher of superior attainments and ability is more likely to take the leading part in its direction.

The Infant School.—As already stated, the law operates in the way of compulsory attendance when a child attains the age of five years. It has, however, been a fairly general practice to admit children when three years old if the parents so desire, the Board of Education allowing such children to be registered.¹

In Germany and in the Netherlands there are no Municipal or State infant schools, infant instruction being left almost entirely to private enterprise. In the United

¹ Art. 43 (a), Code 1910.

Note.—Children under three years of age are allowed to attend school, but their attendances are not registered. (Parliamentary Secretary, Board of Education, House of Commons, March 10, 1904.) The Board leave the question of admitting children *under five* "to the discretion of the Local Education Authorities."—*Pref. Memorandum*, Code 1910.

States infant schools such as exist in this country are not to be found. There are, however, some Kindergarten schools to which infants are admitted between the ages of four and six. These have been established in recent years. In France two institutions take the place of the English infant school, viz. the *Ecole Maternelle* and *Classes Infantines*.

Ecoles Maternelles.—The *Ecoles Maternelles*¹ are State schools for children of both sexes between the ages of two and seven. The official programme states: "The *Ecole Maternelle* is not a school in the ordinary sense of the word: it is the transition from the family to the school; it retains the indulgence and affectionate gentleness of home, while initiating the child into the work and regularity of school." It further states that the efficiency must not be judged by the number of lessons and of subjects taught nor by the character of the instruction, "but rather by the sum of good influences which are brought to bear on the child, by the pleasure which he is made to take in the school, by the habits of order, cleanliness, politeness, attention, obedience, and intellectual activity which he acquires, so to speak, in playing." Such schools do not provide accommodation for more than two hundred children, and are open, for the convenience of parents compelled to leave home daily, from 7 a.m. to 7 p.m. in the summer, and from 8 a.m. to 6 p.m. in the winter. The time, however, given to instruction per day is only three hours and three-quarters, and no lesson is allowed to exceed twenty minutes in duration. The subjects of instruction comprise (1) moral education, (2) object lessons, (3) reading, writing, drawing, (4) mother tongue exercises,

¹ See article by Miss M. S. Beard, *Special Reports*, Vol. 8. Also *Special Reports*, Vol. 7, p. 66.

(5) natural history and geography, (6) hand and eye training exercises, (7) singing and physical exercises, (8) recitation. This formidable array of subjects is arranged on the time-table on the principle that change is restful; it may be locally restful, but is not wholly so. Change, however, does serve to sustain interest. There is an intermission of a few minutes between each lesson, and children under five years of age are not taught reading and writing.

Provision is made on the premises for giving the children their meals either on payment or gratuitously, according to the circumstances of the parents. Women helpers other than teachers assist in this work and give all desirable attention to the health and cleanliness of the scholars. Among the Parisian schools of this type, each teacher has charge of about 50 children.

Classes Infantines.—These classes are of two kinds: one serving to bridge over the gap between the *école maternelle* and the ordinary primary school, and usually found in large towns; the other existing in rural districts, and corresponding mainly in age limitations and subjects of instruction to the infant schools in this country.

Ecoles Gardiennes or Jardins d'Enfants.—These are Belgian schools for children between the ages of three and six. The principles applied in the instruction are those which favour Froebelian teaching generally. The work of the children is largely occupational and centres round the mother tongue, nature study, and the duties of life—duties to self, to the family, to mankind generally, and to the country of one's birth. Reading, writing, and arithmetic are taught to the older scholars in some of these schools.

Kinderhorte, etc.—In Berlin and Charlottenburg,¹ and other towns associated with the more recent school buildings, there are rooms (*horte*) reserved for children, who need at least quasi-parental attention. The children may remain in these rooms from 2 to 7 p.m., under the charge of superintendents. The institution is mainly intended for the care of children outside school hours. Play and preparation of lessons are the chief means of employment. Meals are supplied under similar conditions to those associated with the *écoles maternelles*. The school authorities, as a rule, lend the rooms, while the upkeep is provided for by private benevolence. Of late years the activities of the *horte* have been greatly extended. In summer they sometimes expand into vacation schools, and the societies associated with them often arrange excursions for the children and take a general interest in their welfare.

The crèche has now become a reality in most European countries and in America. Its existence, however, in most places, depends on private effort. Mrs. Hilton's crèche, established in 1871 at Stepney Causeway, showed how successfully and usefully such institutions could be adapted to the needs of poor localities. They have accordingly multiplied and are now to be found in most large urban centres. The rules that govern these institutions vary; but, generally, they are open from 7.30 a.m. to 7.30 p.m. Children from three weeks to three or five years old are received daily. Great care is taken to see that all admitted are free from infection, etc. There is every reasonable provision for health and comfort, and there are all the usual accessories for play. Cots are provided for infants. The staff usually consists of a matron and trained nurses.

From the standpoint of school attendance *alone* the

¹ See Report of Mr. G. Andrew to the Scotch Education Department, 1904.

crèche is a useful institution, for boys and girls who ought to be at school are often kept at home for nursing duties while the mother is necessarily at work. On humanitarian grounds, however, the crèche's highest functions may be said to rest.

Infant Schools in this Country.—The English infant school is invariably mixed, and classification is based principally upon age. Originally these schools were intended to confine their instruction to purely infant needs; but congestion in senior departments and organisation demands have sometimes necessitated the retention of children in the infant department after they have reached the age at which, under more satisfactory conditions, they should be drafted to the senior schools. Such children are usually formed into a Standard I. class, and in rare cases, as a temporary measure, even a Standard II. class is found.

Generally an infant means "a scholar under the age of eight years."

Accepting this definition of an infant, and assuming that children enter school about four years of age, it is evident that a course of instruction extending over three years would be the minimum of requirement. Indeed, in many schools children only three years old are admitted, and then a course extending over four years must be applied, supposing that in each case the highest class represents Standard I. Clearly, it is desirable to have separate classes for each grade; but in small schools this is not always practicable, and a modified syllabus must then be adopted, since scholars of various ages would have to form one class. Supposing, however, a department has sufficient children to make four classes, each with its own teacher, the organisation becomes simple, and usually

assumes the following form, if there is a fairly equable distribution of children in regard to age:—

<i>Class.</i>	<i>Age of children at close of educa- tional year.</i>	<i>General attainments¹ at close of educa- tional year.</i>
Standard I.	Over seven	Standard I. attainments or their equivalent.
Class i.	Over six	Such as would enable the children to commence the work of Standard I. or its equivalent.
Class ii.	Over five	Such as would enable the children to commence the work of Class i.
Class iii.	Over four	Such as would enable the children to commence the work of Class ii. Class iii. therefore would represent three removes from Standard I.

In large infant departments there are as many as ten or twelve classes. The common practice has been—it is now gradually disappearing—to number these classes from one to ten or twelve, Class i. being the highest—which in the absence of a knowledge of the courses of instruction associated with each class is very misleading; whereas the adoption of a suggestive nomenclature like that indicated below would place everyone in possession of the approximate position of the class, without necessarily referring to the curriculum. If there are six classes in an infant school—and no Standard I.—two containing children who will be over six years of age at the end of the year, two

¹ This arrangement represents the usual practice; but each head mistress must judge for herself what the nature of the attainments should be.

with those who will be over five, and two with those who will be over four, a definite nomenclature is one representing yearly steps, thus—

Class i. (A)	Class ii. (A)	Class iii. (A)
Class i. (B)	Class ii. (B)	Class iii. (B)

Similarly, if there are nine classes,—

Class i. (A), Class i. (B), Class i. (C), and so on.

This simple nomenclature will avoid confusion, as it is constant in meaning, suggestive in form, and capable of permanent and general application.

Another plan, perhaps a better one, is to call each class a grade.¹

Grade i. would then be the lowest class; Grade ii. would represent a year's advance beyond Grade i.; and Grade iii. would be the highest class—one remove from Standard I., which might well be called Grade iv.

For two or more classes in the same grade the lettering should be used, as already shown. As the word *Standard* is gradually being dropped in its application to classes, so there is need for the acceptance of the *Grade* in senior schools also.

It has already been intimated that there is no necessity to organise a school on the basis of yearly courses of instruction. Schemes of work can be equally well designed to cover a term or half-year. The results, however, cannot of necessity be so appreciable at the end of a few months as at the close of the year; but they are, nevertheless, adaptable to both definition and measurement at the hands of the expert.

Organisation is generally too rigid with its iron-bound

¹ This is adopted in the United States, where the grades, beginning with the lowest class (Grade i.) in the Kindergarten, are continued throughout the senior schools.

compartments in the form of classes ; it needs more elasticity or fluidity. Terminal or half-yearly classification is not designed for pressure, but to facilitate an easy and natural flow of promotion from one class to another. There is, however, less need for this terminal classification in infant schools—except in the highest classes—than in senior departments.

If the playground is suitable, every opportunity should be seized to have some classes under instruction there.

As it often happens that children are admitted to infant schools over five or six years of age who have had no previous systematic training, it becomes a difficult matter to allocate them to suitable classes, especially so when such admissions take place at an advanced period of the educational year. This ever-recurring difficulty accentuates the need for an ungraded room to which such children could be sent, at least for a few months.

From the point of view of general efficiency it is probably desirable, instead of admitting children at all times and seasons, only to allow admissions at two or three stated periods of the year. Certain exceptions to this arrangement would, of course, be necessary to meet special cases. It might apply almost absolutely to all children under *five*. Those over that age, however, have a statutory right of admission to some school.

The Kindergarten.—The ordinary infant school varies greatly in regard to the degree and spirit of application of Kindergarten principles. However, the spirit that underlies the teaching in many of these schools is admirable ; and so far as the younger scholars therein are concerned, the character of the training corresponds with that given in the ordinary Kindergarten.

The Kindergartens are almost exclusively devoted to the

principles of instruction underlying Froebel's teaching. Everything, therefore, is of a practical character, and the classes are small in comparison with those of the ordinary infant school. The Kindergartens of Germany are mostly private institutions. In America, where under State aid these institutions are rapidly increasing in number, the children attend school in the mornings only as a rule, while in the afternoons the teachers devote their time to visiting parents in order to enlist their sympathy and co-operation in the work of training. These visits, too, enable the teacher to obtain, through the mother, an intimate knowledge of a child's peculiarities. In the American Kindergartens about twenty-five children form a class. In like manner, at the Kindergarten School, Froebel Institute, London, no class is allowed to exceed twenty-five scholars. }

Age is, of course, the chief basis of classification in these schools. A transition department, between the Kindergarten and the regular primary school, is to be found in various places.

Inter-departmental Promotion.—The general principles that should operate in the promotion of infants to senior departments may be stated thus:—

- (1) *Drafts should be made terminally or half-yearly.*
- (2) *Age should be the chief consideration in making these drafts, unless the circumstances are very exceptional.* This applies to both minimum and maximum ages. No child, for example, should be drafted who has not reached the sixth year.

- (3) *Attainments should also be a factor, subject to the age qualification.*

- (4) *Disposition may also be a determining factor.* A vicious child should be removed from the atmosphere of

the infant school as soon as possible after reaching the age of seven years, independently of attainments.

In accordance with these principles—

(1) Promotion of pupils should be made either (a) at the end of each half-year, or (b) at the end of each of the school terms, if the school should be organised on a terminal system. Promotions may also be made at other times when desirable.

(2) Pupils who will attain seven years of age during the ensuing half-year (or school term) should not be retained in the infants' department beyond the beginning of that half-year (or term), provided there is no Standard I. class there.

(3) Where there is a Standard I. or an authorised class of older children corresponding approximately to the lowest class of a junior or senior department, pupils who will attain the age of eight years during the ensuing half-year (or school term) should not be retained in the department beyond the beginning of that half-year (or term).

(4) Where there is a Standard II. or an authorised class of older children corresponding approximately to the lowest class but one in a junior or senior department, pupils who will attain the age of nine years during the ensuing half-year (or school term) should not be retained in the department beyond the beginning of that half-year (or term).

(5) A head mistress who has been unable to meet these requirements, because certain pupils are apparently not fitted to enter upon the work of the upper department, or who desires to promote pupils other than those enumerated in the above clauses, should, after consultation with the head teacher of the appropriate upper department, report the facts to the Managers or Local Education Authority, giving a list of the pupils affected.

These rules¹ should apply in all ordinary cases. Where conditions are exceptional, modifications would, of course, be admissible.

With regard to promotion from junior mixed departments, the general principles cited above should apply with some qualifications. (1) would stand. Concerning (2) and (3) not age, but attainments, should be the *chief* consideration. (4) might be ignored.

As junior schools vary so much in their upward limits, it is not possible to lay down equally general rules for *all* of them in regard to promotion to the senior departments without making definite reference to *Standards*; but taking rule (4) above, *that* would apply to all schools where the upward limit is Standard II.

Similarly, if the upward limits are Standards III. or IV., the rule in question should operate by the substitution of *ten* and *eleven* respectively for *nine* years. Rule (5) should apply to all exceptions.

When a head teacher of an infants' or junior department has determined the number of pupils to be promoted to an upper department in accordance with these principles and rules, she should forward to the head teacher of the upper department at the middle of each half-year (or term) a statement of the approximate number of pupils to be so promoted; and towards the end of the half-year (or term) should send a list of such pupils on the following official form provided for that purpose.

The head teacher of the junior and senior department to which pupils are to be promoted in accordance with these

¹ In a slightly modified form these rules are in operation in the County of London; but they are more imperative in form than is expressed here. They represent the minimum requirements for promotion. Obviously, pupils of exceptional ability may be promoted earlier than the age specified.

rules should reserve places for the approximate number of pupils who will be so promoted.

If there is not accommodation available in the junior or senior department for the pupils whose intended promotion has been so notified, the head teacher of such department should inform the Managers or Local Education Authority immediately on receiving the notification in question.

INTER-DEPARTMENTAL PROMOTION.

Term or half-year ending.....19

.....Dept.

Order of Merit. NAME. (Surname first.)	Date of Birth as recorded.			Class in Department.	Date of Admission to Department.	Address.	Remarks, if any, re attainments or any peculiarity.
	Day.	Month.	Year.				

(Signed)

.....Head Mistress.

Whether prior to actual promotion examination tests should be applied, under the dual direction of the head teachers concerned, is a matter for the Local Education Authority or the head teachers themselves. On the whole, the wisest course would appear to be to leave the whole question, subject to the rules already indicated, to the discretion of the head teacher who has been responsible for the training of the children to date.

Co-education v. Separation.—*Separation of the sexes versus co-education.* Much discussion has taken place con-

cerning the relative merits of these two systems. In America co-education has been in operation a long time, and, it is claimed, with highly beneficial results. In Scotland mixed schools are common, owing probably to the influence of Stow. Co-education, too, is the general rule in Holland and Switzerland. Many other countries also accept the principle when applied to rural districts where the population is small; but economy in these cases is probably the determining factor.

In this country the application of the principle has been extended considerably in recent years; but the separation of the sexes, as in Germany and Hungary, is fairly general in the towns, except perhaps in the north of England and, of course, in Scotland. The curricula of junior mixed departments are similar to the *Cours élémentaire*¹ in France, but sometimes wholly or partially cover the *Cours moyen*.

Pros. and Cons.—The advantages of the separation of the sexes in education are—

(1) Neither boys nor girls are retarded in subjects for which they respectively show natural aptitudes. (2) There are fewer breaks in the work of a class as a whole than when boys and girls are mixed. Cookery, laundry, housewifery, needlework take the girls away from the ordinary school work several times a week—especially the elder girls.

(3) The discipline that is suitable for a boy is not, as a rule, equally suitable for a girl. (4) The boy is more likely to get a virile character under the sole direction of a master; and the girl, too, would have a better opportunity,

¹ In France the elementary schools have three grades, standards or steps, viz. *Cours élémentaire*, *Cours moyen*, *Cours supérieur*. These correspond respectively with the ages 6 to 9, 9 to 11, 11 to 13.

when trained by a mistress, to develop that sweetness of disposition which generally distinguishes the best of her sex.

(5) The curriculum can be better arranged, without give and take, to suit the needs of boys and girls and the different ends in view in their education. (6) The field of a woman's work is, as a rule, very different from that of a man's. Cultivation of the qualities essential to each is better secured by separation. (7) Boys in the pubescent stage are apt to become amorously sentimental, and thus have their mental equilibrium disturbed.

The advantages of co-education may be summed up as follow:—

(1) It is an aid to organisation in small schools; it is also an aid to classification in general subjects in all schools.

(2) It produces a spirit of camaraderie between the sexes.

(3) It exercises a chastening influence on the boys and makes them less self-conscious. The girls too become more self-reliant.

(4) The boys show a greater respect for girls and women.

(5) Discipline is more easily obtained if the staff is thoroughly efficient. With a weak teacher, however, difficulties are increased.

(6) Boys are put more upon their mettle, as they have to compete with the girls' natural qualities of patient endeavour and steadiness of aim.

Co-education is still in an experimental stage in this country, considered from a purely educational standpoint. There is, however, a growing tendency to discourage junior mixed departments. Mixed schools generally are more the outcome of economical than of educational claims.

National characteristics must always be a recognised factor in dealing with this interesting problem, and to a great extent also the peculiarity of local conditions. In some large urban centres, for example, there are districts where poverty appears to be at its lowest ebb. Co-education is prohibitive there.

Subject to this latter qualification, mixed schools seem to find their highest justification in evening classes and evening education generally. But institutions of this character are organised as a rule on an entirely different basis from that of the day school—students are grouped according to *subjects*: and this mode of classification wipes off the slate some of the objections to co-education.

Principles of Staffing.—Every school must have a “sufficient and suitable staff.” In determining the sufficiency and suitability of the staff consideration must be given to, (1) The nature of the premises generally—number and size of class-rooms and their distribution. (2) The number of scholars on the roll or in habitual or average attendance. (3) The age and attainments of the scholars and the mode of classification. (4) The character of the courses of instruction, with special reference to practical work. (5) The ability of the teachers, their status,¹ and the suitability of the work assigned to them. (6) The circumstances and requirements of the locality. (7) The organisation and co-ordination of the various schools in the area. (8) Whether all the members of the staff are working whole or part time.²

In most schools, for there is generally but little variation in average attendance, the staff for any year is

¹ See Arts. 11 and 12, also Schedule I., Code 1910.

² Subject to these qualifications, the staff is determined numerically by Art. 12 (a) of the Code.

usually determined, *ab initio*, on the basis of the average attendance of the previous year, provided the conditions have not materially changed.

Special staffing arrangements are demanded by the Board of Education for schools in areas with a small population.¹

The minimum staff scale, as set out in the Code, has evidently been adopted with many peculiar circumstances and a variety of conditions in view. It is not necessarily intended to suit all buildings, but is rather an indication of the lowest point to which a staff may fall, and is then only acceptable as a condition of efficiency.

It has been pointed out in the previous chapter how desirable it is to have a staffing basis much more generous than this scale demands. Having regard to the warning note² in the Code, it is manifestly the wish of the Board of Education that schools should, as a rule, be staffed more generously than the scale indicates.

The usual scale applied by the Education Authority for London, where the Council schools are mostly large, is roughly one certificated teacher for every fifty children in average attendance, the head teacher, centre instructors, visiting teachers, student teachers, and pupil teachers not being reckoned, as a rule, for this purpose. In practice, however, for there are cases in which the class-rooms are sometimes below the average in size—accommodation varying from thirty to forty,—the staff works out as a whole at one certificated assistant for an average of about forty-six³ children in attendance. There is no fixed scale in force for the Non-Provided schools.⁴ The existing practice has

¹ See Art. 12 (b) and Art. 32, Code 1910. ² Art. 12, *ibid*.

³ The West Lambeth Teachers' Association requested that classes in infant and senior departments be limited to a roll of forty and thirty respectively. See *The Schoolmaster*, Jan. 7, 1905.

⁴ Here the average per teacher is below 40.

grown out of general policy, pointing to an unwritten law capable of some elasticity to suit the circumstances of each school.¹

It is reasonable, in small schools, to consider the head teacher, not solely in the light of a director and supervisor, but also as a class master or class mistress permanently responsible for the work of a definite section of the school. The limit of school accommodation to determine such class responsibility must vary with circumstances; but generally it may be said that when the yearly average attendance does not exceed 140 this class-attachment should operate wholly, or at least to a large extent.

The scale of staffing in the Metropolitan area is, on the whole, much more liberal than that adopted by most education authorities. In one or two areas however, London is surpassed in liberality of staffing arrangements. Hornsey, perhaps, takes the foremost position in this respect, for there a certificated teacher is limited to forty scholars; and the average attendance per teacher works out considerably below that figure.

In this brief reference to staffing principles it is assumed that the school is organised on the usual class basis. If, however, it is organised differently, *e.g.* wholly or partially on the principle of *specialisation* or on a *subject basis*, considerations would have to come in which have not been weighed here. Reference to them will be found in another part of this volume.

¹ "The staff of a school is fixed by the Committee, after having given due consideration to the circumstances of each school." There exists, however, one rule, often generously interpreted, *viz.* that where the accommodation of a school or department does not exceed 150, the head teacher is regarded as a teaching unit. The application of this rule is necessarily associated mostly with Non-Provided schools on account of their comparatively small accommodation.

In large departments especially there is a pressing demand—beyond the ordinary staffing scale—for a *floating teacher*, who, as the name implies, would work in all parts of the school as occasion required, assisting those temporarily overweighted with large or otherwise difficult classes, filling up gaps caused by illness, giving special attention to backward scholars, and generally rendering such assistance as would enable the school to move forward on steady lines and preserve the even tenor of its way.

In small schools, too, the inter-departmental floating teacher may be most useful. Let us take the case of two departments (boys' and girls'), each having four classrooms, and each with an approximate accommodation of 150. In cases of this kind it is usual to limit the assistant staff to three teachers, and thus the head teachers are tied to a class. In order to give him and her some relief from this otherwise permanent charge, an additional assistant mistress is sometimes appointed, who gives half time to each department, and thus the head teachers are set free for two and a half days a week to give attention to supervision and other matters incidental to their office. Of course the same principle could be applied to any two or three departments according to circumstances.

Similarly, at the commencement of the educational year, when the senior departments are, as a rule, quite full, and the infants' is at its lowest numerical strength, one or two teachers from the latter can sometimes be spared for a few weeks to work in the senior departments, rendering help to the ordinary class teachers there, on the Batavia system. This is generally only practicable in large schools, but it may sometimes be done in comparatively small ones. The plan is doubly efficacious. It renders efficient aid to the senior schools, widens the experience of the teacher,

gives her power in self-adjustment to another environment, and probably adds to her skill in teaching. It certainly leads, too, to a better understanding of the needs of each division of a school, and helps to put inter-departmental relations on a sound footing.

The temporary changes indicated here need not have such definite limitations. It would often, for example, serve a useful purpose if a girls' mistress were placed in occasional charge of a class in an infants' department and *vice versa*.

Staff Difficulties in Schools of Old Type.—School buildings of the old type, often with a room eighteen feet wide and *any* length, or with one room in the form of a hall without even the suspicion of a class-room, present grave difficulties to the teaching staff. Though some of these buildings are still in existence and in use, most of them have undergone structural changes that render the work of education both easier and more efficient. In the absence of structural alterations, or where such alterations have not, owing to the original character of the building, been completely effective, devices for the isolation of the classes have been adopted, these sometimes assuming the form of curtains, dwarf portable partitions, roller shutters, or collapsible screens extending from floor to ceiling and making a complete separation. By these means, and by a careful distribution of quiet and noisy lessons among the various classes, strains have been lessened and activities economised.

The evils attendant on these antiquated premises, even if to some extent remodelled, have been somewhat accentuated by the general employment of uncertificated teachers, who, through the comparatively small number of children they were officially regarded as competent to teach, have necessarily increased the number of contending

voices in a school. Many of these teachers, however, possess excellent powers of discipline and sound instructive ability; but when a certain number of children, representing two or more classes, must occupy one room, even if comparatively effective screens are used, it is, of course, preferable to have two teachers talking at the same time rather than three or four. On this ground only, apart from other potent considerations, it is desirable to have certificated teachers employed.

And in connection with this matter it is as well to say that teachers generally talk far too much. There is such a thing—and if applied to the teacher's office more often the better would be the educative effect—as *masterly inactivity* or *scientific idling*. Loud or continuous talking is no evidence of sound work; it rather points in the contrary direction. Receptiveness in a child is excellent in its way, but all that is poured into him is useless, unless it enters into the texture of his life, and is thus expressed by his own effort. The teacher, therefore, should talk less and the scholars work more, relying on their own grit. Comparative quietude might then reign in the class-room, and a golden harvest be gathered in. Every achievement of the pupil established by independent attacking power means an advance in personal force, which time, under ordinary circumstances, cannot impair or destroy.

In these cases, therefore, as in all others, every encouragement should be given to private effort. Silent lessons will then prevail. The teacher will find all his or her time fully occupied in helpful direction, supervision, and seeking the word that exalts or restrains.

Two other points arise in connection with old type buildings, whose accommodation is usually small compared with modern school structures, viz. the general need for

grouping two or more grades of scholars together to form a class, and the method to be adopted by the head teacher, if directly responsible for a class, in the supervision of the other classes of the school. The former is discussed in another chapter in connection with the one-teacher school, and the other is also dealt with elsewhere.

Special Classes.—There is a tendency, stronger in the past perhaps than at present, to estimate the worth of a school by the number and character of its *scholarship* successes; and through this tendency an unfortunate practice has been fostered and extended. Pupils of apparent promise, within certain age limits, are sifted out from the various classes in a school and converted into a section working on special lines, with the view of securing the exhibitions or scholarships available in the area. This is the substitution of an immediate end for the remoter one of sound harmonious training, which every good school should have constantly in view for each of its pupils.

To divert the prescribed course of training into the narrower channels that lead to success in mere examinations of this kind, the shallows and depths of which are well known to the teachers concerned, is a reprehensible practice, a breach of a national, local, and parental trust, and a subversion of the principles that inspired those who gave the opportunities for a higher education on a scholarship basis.

The ultimate effect of such classes is not infrequently disastrous to individuals. The forced pace—to say nothing of the shallow work—is calculated to disturb the natural order of development, and often to give to the less able pupil, who cannot fully profit by them, the opportunities primarily intended for others. Every weakling that crosses the scholarship bar is in a false position, and his last state as a scholar is likely to be the worse for this transition.

Problems and Experiments.—That school only is really alive that sees and appreciates the many problems that are incidental to its existence. The approximate solution of one problem paves the way for the solution of another, and brings an added light into the class-room. Without the energising influence of the desire for continual discovery, a school cannot be strong. To influence childhood rightly, the spirit of it must be present. Nearly every pupil—certainly every boy—is a born adventurer. Let him therefore, within limits, indulge in his natural bent, and discover things for himself. Indeed, the atmosphere of the school should be alive with this sentiment or this attitude of mind. If it is there, it will be felt; if not there, it will be missed.

To move constantly in grooves wrought by the energy and wisdom of past generations is good up to a point; but there is a limit to these acceptances, around which only the twilight plays. The mind of the unbiassed critic must be brought to bear upon every phase of school work, if the machinery of organisation is to move with ease and be fully adapted to what the school is designed to accomplish.

An intelligent appreciation of one's bearings is, of course, needful in these matters; but no dread of failure, or of official censure, when conviction points the way, should deter the teacher from entering on a reasonable experimental course, whether it concerns organisation directly or indirectly. It is better to have experimented and failed than not to have tried at all. The knowledge that springs from a qualified success, or even from failure, may be a beacon light to show the way to higher things.

To understand each scholar is an essential part of the teacher's business—to know strong points as well as weak

ones. For this purpose mere casual observation and mental note-taking are hardly sufficient. The research should move on scientific lines. Medical inspection will render material aid in this direction; but it should on no account be allowed to diminish the responsibility of the teacher on the intellectual and moral side. Indeed, the teacher's work in this respect should show its paper records, at least for each abnormal pupil, much in the same way as the doctor records his investigations. On the basis of these records, experiments in classification and method might sometimes be tried.

Some Merits and Defects of the Class System.

—The class system, which prevails in all schools, was originally the outcome of economical rather than of educational considerations: it made education possible to the masses. Private tuition has much to commend it; for the instructor has only to adjust his method and energies to the needs of one pupil, of whom he should have an intimate knowledge, considering the comparatively small field of his work. Private tuition, however, has some serious defects, and is not without its dangers. It only represents one relation, viz. that between the instructor and the pupil, with the rights and obligations attaching to each. There are necessarily absent that stimulus which springs from emulation, and that broad corporate spirit which animates equals striving for a common end. There is also an absence of that formative influence which comes from continual individual and group contact with comrades; and there is the further defect that the conditions that underlie private tuition bear no real resemblance to those that must govern the life of the adult. The assistance that is practically always at hand to surmount difficulties encountered by the pupil is the chief danger of the

purely individual system of instruction; for without conflict with obstacles, or difficulties, self-surmounted or self-mastered, there can be little intellectual or moral development. It may be said that private tuition, wisely applied, is excellent from a purely subjective standpoint; but education must bring into prominence the objective side also, and in this respect private tuition is weak.

Class instruction, if the number of scholars does not pass beyond reasonable limits, has many advantages. The child has to be prepared for life in all its phases—as a social being, as a citizen, as a thinker and worker who should contribute something to the common welfare. It is desirable therefore that his training should be effected in surroundings and under conditions that have some similitude to those under which he must live in the future.

The school touches the community of men and women; it is part of the state organisation; it is in contact with national life. The child's responsibilities therefore in relation to others can be realised to some extent from training experience: they cannot be realised through mere abstractions. And these responsibilities are a factor in the class system, which has its definite interests and activities, to which the individual contributes and to which, in some degree, he subordinates his personal claims if not conducive to the common end. Group interests and activities give the scholar a broader view of the obligations of life than the system of private tuition—for the concept involving them is wider and stronger in appeal. A healthy competitive element is, too, usually present, and this is a stimulating force of great value.

While private tuition represents only one relation, the class system represents at least three, viz. (1) the relation

between the pupil and the teacher, (2) the relation between the pupil and the group or class, and also with each member of it, and (3) the relation between the pupil and the school as a whole, *i.e.* the school community, including staff, scholars, and everything that the name of the school connotes. These broader relationships in action, and the ideals associated with them, lead to the expansion of life.

It will be noticed that some of the other merits of class instruction have been negatively expressed in connection with private tuition. It is unnecessary to state them in positive form.

On the other hand, the class system leaves much to be desired. When the old Jewish ideal of the size of a class¹ is realised, which is the one now considered most suitable for secondary schools, possibly everyone will be satisfied. Except under careful and discriminating management, there is a strong tendency for the individual to become submerged in the mass, and hence a danger of the instruction being reduced to the level of machine work. Those probably who lose most under the existing practice are the clever children and the dull ones. There is necessarily a certain amount of waste effort which no foresight or device can entirely eliminate; it is incidental to the mechanism of class routine, and to a smaller extent to class instruction: the larger the class the greater must be the waste. Instruction must be generalised. It cannot thus wholly fit in with each child's requirements. No two children observe, think, and act alike, or have exactly the same kind or degree of receptive power. The differences are probably slight in most cases, but their presence is sufficient to lead to inequalities in development and attainments. What is clearly wanted is a compromise between class and individual instruction.

¹ Twenty.

The Batavia System.—It is realised that the class system is by no means perfect. The individual needs much more attention than the system, under existing official conditions, is warranted to give. Some readjustment seems therefore desirable between the claims of class and individual instruction. This is to be found in the "Batavia system," largely employed in American schools, which, without sacrificing the best features of the class method, eliminates its most serious defects and recognises the necessity for systematic attention to the individual.

It consists, in its highest expression, in making one teacher responsible for a class regarded as a whole, and another fully qualified teacher chiefly responsible for individual attention to the members of that class. It is not, however, essential to have *two* teachers where one now suffices, if the spirit of the system is preserved and definite provision made for training on the individual basis. This individual basis occupies a prescribed and definite position in school work, and is moreover governed by the following wise restrictions and limitations:—No pupil is allowed to show any conscious indications that he is in need of assistance in his studies. The teacher, in the course of his investigating survey, must discover this need and render such help to the pupil as will enable him to master difficulties for himself. There must, in other words, be no direct help. The real power to surmount obstacles must come from the pupil. The teacher might, for example, call attention to a principle and leave the scholar to apply it. The broad basis of the self-development method must always be recognised.

This system must, of necessity, if carried out scrupulously, cultivate individual resource and self-reliance.

But how is the Batavia method to be applied to a one-teacher class? In the American schools, where the study and recitation lessons prevail, the application is not a

difficult one; for the two types of lessons are connected on a subject basis—the recitation lesson being largely, if not wholly, a test of the efficacy of the study lesson. In English schools the practice is by no means the same; but in any case the one-teacher class must be divided perhaps quite arbitrarily, except in some cases, into two approximately equal sections; and one of these groups or sections must take private study, whilst the other group claims for oral work most of the attention of the teacher, and *vice versa*.

In some subjects—writing, drawing, singing, physical exercises, Scripture—the two groups could, as a rule, combine; but in others, like arithmetic, reading, geography, history, etc., the lessons should, as far as possible, alternate between private study and oral lessons, the latter being partially used as a test of the efficacy of the private endeavour in these subjects.

It is, however, extremely important that the private study period, which has both a strongly positive and negative aspect—positively for good and negatively for evil—should be individually effective. Waste, in the form of idleness, dilatoriness, and misdirected energy, will be sure to creep in unless the assignment of work has been judiciously made and each scholar is conscious beforehand that his application will be inevitably tested to discover any weakness in his work or any attempt to shirk his personal responsibilities.

Most English text-books, unlike the American, have not been designed to meet private study exigencies. The able teacher, however, will find means of meeting these deficiencies by carefully prepared questions, either written on the blackboard or on separate sheets of paper supplied to each pupil.

A further consideration has weight in this connection.

Lessons in schools, elementary and secondary, are generally too prolonged for intense work. Shorter periods, with a greater demand on the energies—even if brief intervals for rest intervened—would prove far more effective. If the period devoted to private effort is long—passes the point where interest flags and the will-power weakens or fails, or where monotony and tedium set in—the temptation is especially great for the ordinary scholar to lapse into idleness and possibly mischief. The set-back in cases like these will demand much strenuousness on the teacher's part to recover the lost ground—lost not so much in time as in the incipient process of the formation of undesirable habits. Indeed, it may be said that there is no side of school work more likely to be productive of evil than the private study lesson that has not been wisely organised, carefully supervised, and thoroughly checked. This, however, is not a reason for using it sparingly. It is the most effective educative weapon that can be employed; but like all weapons its utility depends on the skill with which it is put into operation.

It is claimed for this system of "class-individual" instruction that it is a uniform and unqualified success when carried out in the right spirit by an efficient teacher; that it eliminates the backward scholar—for immediately retardation appears special attention is given to him, and he soon rises to the level of the other members of the class; that regular promotions can be safely carried out; and that many pupils are able to master a two-years' course in one year.

It need scarcely be observed that the Batavia method is based on sound principles. There can be no doubt of the great value of its application on a large scale, provided it is safeguarded by the precautions and limitations already mentioned.

It must not, however, be supposed that the Batavia method is a modern discovery. It is really an old principle with a new name that has been applied in varying degrees since the class system became a necessity. A reference to the general principles that must operate in a one-teacher school¹ will show, in conjunction with the school's time-table, how "class-individual" instruction can be applied; but in this instance the method is at work under most unfavourable conditions. With one class of scholars of approximately equal attainments,² the teacher should experience no real difficulties if he distributes his time over the two sections of his class, much in the same way as the sole teacher must do over the two divisions of the one-class school.

¹ See pp. 74-82.

² It will be found in practice that nearly every class could be divided into an upper and lower division. Some might prefer the arbitrary line of separation for this purpose, while others regard attainments and natural ability as the fitting criteria for a division.

CHAPTER IV.

"Acquirement of every kind has two values—value as *knowledge* and value as *discipline*."—H. Spencer's *Education*.

"It is a law of human nature that those who are debarred the higher gratifications fall back upon the lower."—*Ibid*.

ORGANISATION IN VARIOUS TYPES OF SCHOOLS. THE WORK OF THE STAFF. SOME TIME-TABLES.

The Ordinary Graded School.—The constitution of the various ordinary Elementary Schools has been indicated in Chapter III. On a functional basis they may be classified into (1) Ordinary Graded Schools, (2) Special Schools, and (3) Higher Grade or Higher Elementary Schools.

Schools for higher education may be divided into (1) Secondary Schools, (2) Day Trade Schools, (3) Day Technical Schools, (4) Evening Schools.

It is not possible to consider here every type of school from the point of view of organisation. It is, however, desirable to deal somewhat fully with a small elementary school that is about one remove above the one-class or one-teacher school. This consists of a combined mixed and infants' department in which the head teacher is aided by one assistant mistress or by a student teacher. The principles that must determine the organisation of a school of this type will be found applicable to the majority of rural

institutions similar in character but perhaps a little larger in accommodation. They should also apply, to a considerable extent, to all grouped classes.

It is clear that organisation and distribution of the staff must chiefly depend on the number of teachers as well as on the number of scholars and their attainments. It will be preferable to take four fairly definite cases of senior departments by way of illustration, stating for each the approximate number of scholars and the quantity of the staff, assuming also that the following conditions or principles are operative: (1) That there is a fairly equal distribution of pupils over the grades or standards in the lower part of the school. As a rule the numbers in the grades diminish, sometimes considerably, above Standard IV., and Standards I. and II. are usually the largest. (2) That the ordinary class system is adopted. This will permit of a limited specialisation if desirable. (3) That no class must have more than 60 pupils, and that a combined class, as a rule, should not exceed 40 on the roll. (4) That the class-rooms will admit of the organisation without overcrowding; and (5) that each teacher is placed in charge of that class in which he can render the most effective service.

CASE I. 100 to 120 Scholars. *Staff*¹—H.T. + 2A.

Organisation:—Sts. I. and II., Sts. III. and IV., Sts. V. to VII., the H.T. being in charge of the first class.

CASE II. 150 Scholars. *Staff*—H.T. + 3A.

Organisation:—Sts. I. and II.b², Sts. II.a and III., Sts. IV. and V., Sts. VI. and VII., the H.T. taking the first class.

¹ H.T. + 2A = Head Teacher + 2 Certificated Assistants.

² II. b represents a section lower in attainments than II. a.

CASE III. 200 Scholars. *Staff*—H.T. + 4A.

Organisation:—St. I., St. II., Sts. III. and IV., Sts. V. to VII. Here the H.T. should not be tied to a class, but should divide a large part of his time in rendering substantial assistance to the teachers in charge of the first and second classes.

CASE IV. 250 Scholars. *Staff*—H.T. + 5A.

Organisation:—St. I., St. II., St. III.

$\left\{ \begin{array}{l} \text{Sts. IV. and V., Sts. VI. and VII., or} \\ \text{St. IV., Sts. V. to VII.} \end{array} \right.$	}	according to numbers and other circumstances.
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Here, as in the previous case, the H.T. should give a considerable amount of attention to the first and second classes in the one instance, or the first class in the other.

It is manifest that grouped classes must exist, to some extent; in every instance where the quantity of the staff falls below the number of grades in the school. The above staffing should be regarded as the minimum. When possible, combined or grouped classes should be avoided, except for certain subjects that lend themselves to this arrangement.

With regard to the small combined mixed and infant school already referred to, the time-tables for each division are given on pages 170 and 171, together with a few explanatory critical notes. In mixed departments generally, complications arise on account of needlework and of practical instruction in domestic subjects. The position is met by the boys' taking drawing and physical exercises or organised games while the girls are employed with the needle. This most often involves a temporary re-grouping. If the third and fourth classes are mixed, for example, the

girls in these two classes would combine for needlework, and the boys similarly for drawing or other subject determined by the time-table. With regard to domestic subjects, a well organised system should provide for the training of the girls at the centres at the same time as the boys are engaged with their woodwork. The needlework alone in mixed departments makes it imperative to have at least half the members of the assistant staff consisting of women teachers.

The organisation of the one-teacher school has already been considered in Chapter II. In larger departments than those indicated above the classification becomes comparatively easy, since grouped classes tend to vanish with larger accommodations. Such classes, however, though on general grounds undesirable, are not without some advantages. They necessitate much repetition and overlapping of work; and if this is skilfully and appropriately carried out by the teacher, nothing but good can result from it, assuming that there is a rational system of promotion in the school, and that this is operative throughout the year. The one great fault that lies at the root of class teaching in many large schools is haste—almost a feverish anxiety to cover the syllabus as rapidly as possible and a consequent contentment with scratching the surface rather than ploughing deep. Every item of instruction is worthy of a broad base and a firm foundation.

As already advised, when the head teacher must act as a permanent class teacher, or when much of his time must be devoted to teaching, it is eminently desirable that he should devote most of his energies to the first class. The scholars there stand most in need of the strongest personality available in the school. It enables him, too, when time for supervision is practically nil or very limited, to test the worth of the methods and the general value of

TIME-TABLE (INFANTS' DIVISION).

TIME-TABLE (INFANTS' DIVISION).															
		Morning.					Afternoon.								
Day	Cl.	9.0-9.40	9.45-10.5	10.35	10.50	11.20	11.30	12.0	1.55	2.0-2.30	3.0	3.15	3.35	4.0	4.10
Mon.	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Writing	Draw, and Needlework	Language Less.			Recitation	Handwork	
	I. & II.	Religious Instr.	Recit.	Arith.	Obj. Less.			Expression	Reading		Writing		"	"	
Tues.	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Writing	Draw, and Needlework		Reading	Story Telling		Handwork	
	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Expression	Reading		Recitation	"	"	"	
Wed.	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Writing	Draw, and Needlework		Recitation	Reading	Handwork		
	I. & II.	Religious Instr.	Recit.	Arith.	Obj. Less.			Expression	Reading		"	Writing	"	"	
Thur.	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Expression	Reading		Writing	Story Telling	Handwork		
	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Writing	Draw, and Needlework		Reading	"	"	"	
Fri.	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Writing	Draw, and Needlework		Language Less.		Optional		
	I. & II.	Religious Instr.	Singing	Arith.	Reading	Writing		Writing	Draw, and Needlework		"	"	"	"	

Optional

Class	Religious Instruction	Recreation	Singing and Games	Arithmetic	Reading	Writing	Drawing and Needlework	Recitation	Object Lessons	Language Lessons	Expression	Story Telling	Handwork	Optional	Prayers and Dismissal	Total
I.	230	150	110	160	170	150	90	90	60	60	60	40	100	45	50	1550
II.	200	150	110	150	170	170	90	90	60	60	60	40	100	45	50	1550

NOTES.—The Infants' division consists of about 26 children, 5 of whom are in St. I. St. I. and Grade III. form the 1st Class. Needlework is inadvisable—certainly for girls below St. I. attainments. Half-hour lessons are, as a rule, too long for infants; but in this instance it is apparently necessary owing to the existence of two sections and only one teacher. Religious instruction varied by singing hymns and memorizing texts.

TIME-TABLE (MIXED SCHOOL OR SENIOR DIVISION).

Morning.

Afternoon.

Day	Class	9.0-9.40	9.45-10.35	10.45	11.25	12.0	1.55-2	2.30	3.0	3.10	3.35	4.0	4.5	4.10
Mon.	I. & II.	Religious Instr.	Arith.		Gen. Inf.	Composit'n	Registration	(Boys) Drawing (Girls) Needlework		Recreation	Letter Writing Dictation	Spelling Recitation	Physical Exercises or Tables	
Tues.	I. & II.	Religious Instr.	Geog. Arith.	Recreation	Arith. Trans.	Transcrip'n Geography		Singing English	English Composition		Dictation Transcription	S. Reading Reading	Prayers and Dismissal	
Wed.	I. & II.	Religious Instr.	Arith. English		Reading Arith.	Composit'n History		(Boys) Drawing (Girls) Needlework			Recitation Reading	Reading Dictation		
Thur.	I. & II.	Religious Instr.	History Arith.		Arith. Reading	Reading Transcrip'n		Singing "	English Composition		Copy Books Recitation	Reading Wd. Exer.		
Fri.	I. & II.	Religious Instr.	Arith. Geog.		Geog. Arith.	Transcrip'n Reading		(Boys) Drawing (Girls) Needlework			Recitation Copy Books	Optional "		

Class	Scripture	Registration	Drill	Arithmetic	Composition	Reading and Writing	English	Geography	History	General Information	Recitation	Singing	Drawing and Needlework	Spelling	Optional	Tables	Dictation	Recreation	Prayers and Dismissal
I.	200	25	60	200	70	125 125 125	60	80	40	40	50	60	180	50	25	15	25	100	25
II.	200	25	60	200	95	125 125 125	70	75	35	40	50	60	180	25	25	15	50	100	25

NOTES.—This school is considered a very successful one having regard to conditions.
 Class I. = Sts. IV. to VII.—20 scholars. Class II. = Sts. II. and III.—15 scholars.
 "English" = Pract. English Grammar.

the work in the other classes, particularly those of the class immediately below. If the teaching and training are sound, indifferent, or weak in the lower classes, the effects will reveal themselves in accumulated form in the highest class. This closer touch with scholars will give the head teacher surer information than examinations can supply.

The infant school, on the whole, presents fewer difficulties in the way of organisation than senior departments. It is limited to three or four grades, whereas most senior departments have to cater for seven or eight. The larger the accommodation, however, the fewer are the difficulties in each case, provided there is a suitable and adequate staff. In a small infant school of three grades with only one teacher the barriers to sound training seem almost insurmountable, for the younger children are so helpless and need constant attention. In this instance there is probably only one course open, viz. to work the school as one division for most subjects, and to differentiate Grades I. and II. from Grade III. when *reading* and *writing* have to be taught to the older scholars. The work in Grades I. and II. as a grouped class should be confined to nature study, language, games, free-arm drawing, and practical instruction in the little courtesies of daily life.

Handwork, in all departments, is most suitable for the afternoon session.

General Plan of Procedure followed by the Head Teacher in keeping a small Combined School going. Time-tables are given on the two preceding pages.—Teachers and monitors present ten minutes before school time to give out books, pens, etc., and set up sums and drawings so that classes can start work immediately. (The day's work must be carefully planned beforehand or all the lessons cannot be fitted in.)

While teacher gives oral lesson to one class the other has written work, study or silent reading.

Interest is maintained by varying the methods of teaching, by games, competitions, etc.

Correction of exercise books is done after school, but the teacher goes through them with the class each morning.

Practical work insisted on—the *children* to be always *doing* something.

Special attention paid to enunciation. Slovenly speaking not permitted. Children taught to express themselves well by means of oral composition (in the lower standards), answering at length (in the upper), questioning each other, story-telling, etc.

Discipline not too rigid: children encouraged to speak and act naturally. Kept happy and busy. *Always something in hand for odd minutes.* Corporal punishment seldom needed.

5 marks given each Session:—Punctuality, 1; Attention, 1; Conduct, 2; Industry, 1; *i.e.* 100 per week.

A list of marks earned by each scholar is put up in school every week, and prizes awarded once a year to the Senior Scholars, but *more frequently to the Juniors.*

Sts. II.-VII. (taught by mistress) are grouped for singing and physical exercises.

Sts. IV.-VII. grouped for all subjects except reading and arithmetic. Sts. II. and III. grouped for oral work.

The Infants and St. I. are taught by a student teacher in class-room.

A weekly record is kept of work done. An examination is held at the end of each term, and the children are not usually promoted oftener than once a year.

The Younger Infants.—The classification in infant schools was considered in a previous chapter. There is,

however, one phase of the work which merits special attention here: viz. that which concerns children under the age of five years. The Report of the Consultative Committee¹ on this question deserves notice, especially as it has a definite bearing on organisation. Some of the views and recommendations of the Committee run substantially on the following lines:—

1. The best place for all children under five years of age is a good home. Such a home, of course, presupposes an intelligent and devoted mother, able and willing to care for and to train her children in a proper manner. This natural relationship between mother and child, when the former recognises her responsibilities, is one the effectiveness of which no school can supply, and whose power no State policy should attempt to impair. Under existing economic conditions, however, the homes and surroundings of many children are not satisfactory, and this is especially so in slum districts. It is desirable, therefore, that children from such homes should be able to go to places especially intended for their training, and no obstacles should be raised to their admission by the Local Education Authority.

The Committee also consider that the best places for this purpose are nursery schools attached to public elementary schools. Private institutions are also desirable when they form a link in the educational system, especially in those areas where it might be unreasonable to compel the Local Educational Authority to provide nursery schools. Such private institutions, however, should be subject to public inspection, and have the same educational basis as the nursery schools, and should be conveniently near public elementary schools, with which they could work in harmony, so that the transition from them to the public elementary

¹ 1908—issued by the Board of Education.

school should be made as easy as possible. These private institutions, if conducted with the consent and approval of the Local Educational Authority, should be assisted by public grants.

"Nursery schools" include (a) public elementary schools which contain properly organised classes for younger infants (babies' classes and rooms) and where the methods of instruction applied to such infants are uniformly carried out on Froebelian lines, and (b) any other Kindergarten institutions that cater for the training of children under five years of age. Special stress is laid on the difference between the infants' school with the modern spirit of instruction and the infants' school that still moves on old-fashioned lines.

2. *Premises.*—With regard to the nursery school it is advisable to have special building regulations for the premises, as younger infants are even more dependent upon light and air and sunshine than older children. Heavy desks and galleries should never be used, but small tables and chairs should take their place, as these can be easily set aside to make room for games and play. Much more floor space should be provided for younger infants than is generally the case at present for older children. There should be easy exit direct into the playground from all rooms in the nursery school. The playground should be partly under cover so that infants can spend as much time as possible therein. It is desirable that the playgrounds, too, should contain trees and small plots for gardens. The offices and washing arrangements should be as complete as possible. Some simple means of giving the children baths, as is done in the Ecoles Maternelles, and also in many elementary schools in various parts of Europe, are desirable.

3. *Curriculum.*—This should be so defined as to give

the children's natural instinct for movement full consideration. There should be plenty of games and free play in the open air whenever possible; it is even desirable that half the school time should be spent in the open air. There should be no rigid time-table, and no lesson should exceed fifteen minutes. Generally, the Committee would have the curriculum and the methods almost exactly the same as those in the babies' section of one of the modern infants' schools. Infants should be allowed to sleep whenever they are sleepy. The nursery school should be kept open during the same hours as the school for senior children, in order that the older ones may escort their little brothers and sisters to and from school. Generally speaking, nothing should be done in the nursery school that prolongs complex operations of the nervous or muscular systems. All formal lessons in reading, writing, and arithmetic should be rigidly excluded.

4. *Apparatus*.—This should be much the same as that found in good babies' rooms in modern schools, with the addition of net-beds or other suitable and sanitary provision for sleeping, and also a piano.

5. *Staff*.—The best person to have the management of a nursery school is a well educated teacher trained on Froebelian principles in the widest sense of the term. She should, therefore, have made a careful study of the physical and mental development of childhood. She should have passed through a course of nature study and have a knowledge of literature and history from which she could select what is appropriate in poetry and story.

She should have knowledge of hand-work, and have had some training in the detection of physical and mental fatigue and in the physical condition of young children in health and disease. The number of little

BABIES' TIME-TABLE.
(Ages 3 and 4 Years.)

Afternoon.

Morning.

Day	9.0-9.10	9.10-9.40	9.40-9.50	9.50-9.55	10.30-10.45	10.45-11.0	11.0-11.30	11.30-11.45	11.45-12.0	12.0-2.15	2.15-3.0	3.0-3.10	3.10-3.30	3.30-3.45	3.45-4.0
Mon.		Texts and Hymns					Sand Work and Repetition	Nursery Rhymes			Kindergarten Occupations and Picture Lesson		Story or Sleep	Toys	
Tues.		Old Testament			Nature Talk		Writing and Recitation	Marching or Action Songs			Marching, Games, Toys, etc., in Hall		Picture Lesson or Sleep	Toys	
Wed.		New Testament			Nature Talk		Colour Lesson and Story	Nursery Rhymes			Nursery Rhymes to Stories dramatized in Hall		Drawing or Sleep	Toys	
Thurs.		Old Testament			Conversational Lesson		Writing and Recitation	Marching or Action Songs			Marching, Babies' Band, Dancing, etc., in Hall		Picture Lesson or Sleep	Toys	
Fri.		Texts and Hymns			Nature Talk		Sand Work and Repetition	Nursery Rhymes			Drawing and Repetition		Story or Sleep	Toys	
<div>Marking early Registers</div> <div>Marking and closing Registers</div> <div>Letters and Singing</div> <div>Lunch and Play</div> <div>Marking and closing Registers</div> <div>Dressing, Grace, and Dismissal</div> <div>Marking and closing Registers</div> <div>Play</div> <div>Dressing, Prayers, and Dismissal</div>															

" Keeps the babies happy, fresh, and bright.

children under one teacher should never exceed thirty. Where, however, a Nurse or *Femme de service* is appointed to assist the teacher with a view to attending to the children's physical needs, the number of children forming a class might be slightly increased.

6. When there are many imperfect homes in an area, the majority of children who will eventually attend the elementary school should be considered eligible for admission to nursery schools when three years of age.

The time-table on p. 177 is suitable for children between three and five years old. It is only intended as a rough guide to the class teacher and may be varied from day to day according to circumstances, even according to the weather. A five minutes' rest between lessons is permissible, and desirable. The children spend as much time as possible in the playground. The *writing* is on free-arm lines (sand, etc.), and the Scripture lessons are varied by hymns and by memorising texts. The time from 2.15 to 3 p.m. is devoted to at least two lessons, with necessary intermissions for rest. From 9.55 to 10.30 a.m. there are again two lessons. The letters of the alphabet are taught incidentally through games and make-believe devices.

ELEMENTARY SCHOOLS SERVING A SPECIAL PURPOSE.

Partial Exemption Schools and Scholars.—Under provisions of the Education Acts and the bye-laws of Local Education Authorities, children may obtain partial exemption from school for purposes of employment. Such children must attend school in accordance with the terms of the certificate of exemption and receive on each attendance two hours' secular instruction. To meet the needs of these children half-time schools were established in some large

centres of industry. As far as practicable, one set of scholars attend in the morning and another in the afternoon. When partial exemption scholars attend an ordinary full-time school, separate registers must be kept for them. The term "partial exemption scholar" means a scholar certified by the Local Authority to be employed in conformity with the bye-laws, "or, if not subject to the bye-laws, in conformity with the Elementary Education Act, 1876, or any other Act regulating the education of children employed in labour, and in either case he must be recognised by the Board as a partial exemption scholar."¹

The partial exemption scholar must be over eleven years of age and be "beneficially and necessarily" employed.

In half-time schools each afternoon's work must necessarily be a duplication of the work of the morning.

Industrial Schools.—These institutions have become a necessary part of the educational system. They were established to meet the special needs of children charged before a magistrate either under (1) the Industrial Schools Act of 1866, or (2) the Elementary Education Act of 1876. The former Act has now been repealed and the latter partially so by the Children Act, 1908, which now operates on all matters of this nature. This Act recognises three classes of Industrial Schools:—

(1) Ordinary industrial schools where children are lodged, clothed, fed, and taught; (2) day industrial schools, for children trained on industrial lines, who receive one or more meals a day; (3) special industrial schools for children suffering from some mental or physical defect.

¹ Art. 43 (c), Code 1910, and Sched. IV. 24-26. In the Report of the Inter-Departmental Committee on Half-Time Employment there is this recommendation—"that all partial exemption be abolished from a date not earlier than January 1st, 1911."

These schools must be certified by the Secretary of State and inspected annually by an inspector appointed by him.

Children found begging, or with "no visible means of subsistence," or associated with "unfit" parents or guardians, or charged with some punishable offence, or disobeying attendance orders made under the Education Act, 1876, may be committed by a magistrate to one of these schools for a definite period. Generally speaking, the provisions in the Act concerning industrial schools are also applicable to reformatory schools. It is the duty of the local educational authority to provide for the reception and maintenance in industrial or reformatory schools of any child resident in its district who is ordered to be sent to such schools.

Most of these institutions are residential. They are really half-time schools so far as the regular elementary school curriculum is concerned, the other five half-days being devoted to manual training in wood and metal work, tailoring, bootmaking, gardening, farming, and other kindred employments of a practical nature.

Institutions of a like character are in existence in the United States and most European countries. They are called Parental Schools in America.

Vacation Schools¹ are of comparatively recent growth. Private enterprise, supported by official sanctions, called them into existence and assisted in their development. Under the Education (Administrative Provisions) Act, 1907 (S. 13), the local education authority is now empowered to provide for elementary school children "vacation schools, vacation classes, play-centres or other means of recreation during their holidays, or at such other times as the local education authority may prescribe, in

¹ See Report of the Education Commission of Chicago, 1900.

the school house or some other suitable place in the vicinity."

Accordingly many school buildings and playgrounds, under, of course, proper guidance and supervision, become a busy hive during the long summer holiday. Manual training and nature study are the subjects mostly taken by the boys. The girls, too, take up the latter subject together with the domestic arts and other manual exercises, while the infants are happily employed with kindergarten games.

These employments are supplemented by occasional excursions into the country. As far as possible, the work is carried on in the playground or other open air places. In many of the large cities of the United States the demand for admission to these schools is so great that it cannot adequately be met by private enterprise. In New York vacation schools have been adopted as part of the school system. "Holiday courses," consisting mostly of organised games, are also carried out in Berlin.¹

"Special Schools."²—For purposes of these schools defective children are classified into

- (1) Mentally defective.
- (2) Physically defective. These again are sub-divided according as they are
 - (a) Physically defective other than blind and deaf.
 - (b) Blind.
 - (c) Deaf.

¹ See Report of Mr. G. Andrew to the Scotch Education Department, 1904.

² "Special Schools" = schools for the blind, deaf, defective or epileptic children, for which the Board of Education have a special Code.

It will be convenient to deal with (1) and (2*a*) first. The regulations of the Board of Education determine the minimum conditions concerning the school premises, terms of admission, and general treatment of these children. No child is admitted under the age of seven or retained after reaching the age of sixteen, except in the case of physically defective children, who may be admitted when five years old.

Most of the children of this type find their way into these special departments through the agency of the head teachers of the ordinary schools, whose duty it is to present defective children to the medical officer for examination on the occasions of his visits to the "special" department. Every child, before admission, must be certified by the local authority's medical officer as defective.

The hours during which a special school is open may vary from $1\frac{1}{2}$ to $2\frac{1}{2}$ each session. The time-table must provide for instruction in (1) reading, writing, and arithmetic, (2) singing and recitation, including training in proper breathing, (3) nature study and observation lessons, (4) drawing, (5) needlework for girls, (6) physical exercises, (7) manual instruction—a wide interpretation is given to this, and not less than six hours weekly must be devoted to it.

The class-rooms usually accommodate not more than 20 scholars, and are furnished with single desks. Rooms for manual instruction are also provided in most recently built schools.

Age is no consideration in classifying the *mentally* defective. When there are sufficient children they are usually classified into three groups for purposes of instruction. Under similar conditions the *physically* defective are classified in much the same way; but age comes in as a minor consideration occasionally. Vivid realistic

presentation, combined with practical work, should characterise all the instruction.

The law demands that the children be examined "from time to time" by the medical officer, and that proper records be kept. The practice generally is for the medical officer to visit twice a year and re-examine the scholars, for under the Epileptic and Defective Children's Act, 1899, a parent can insist on re-examination of a child every six months. When any child, under thirteen years, has made sufficient advancement and is otherwise fit, he is drafted to one of the ordinary school departments.

A line is drawn between the physically and mentally defective in educational treatment. Separate buildings, or buildings structurally separated for each type, are therefore provided. In the case of the merely physically defective (cripples, etc.) whose education has been retarded through illness, it is generally found that they have normal capacity: hence the range of work for them need not be so restricted as in the case of the mentally defective. Specially constructed desks and chairs, and all those easy conveniences in the way of furniture and equipment which a benevolent foresight can supply, are found, as a rule, associated with these centres. A trained nurse is usually attached to each centre; ambulances bring cripples and invalids from home to school and back again; and arrangements are commonly made through voluntary aid, the parents bearing part of the expense, to give these afflicted little ones some sustaining refreshment at midday, when compelled to remain on the school building.

When a local education authority has ascertained that there are within its area some defective children, other than the *blind* and *deaf*, it may—but is not under any legal obligation to do so—make special provision for the education of such children.

**TIME-TABLE OF A SCHOOL OF THREE CLASSES (CLASS I. IS THE HIGHEST CLASS)
FOR MENTALLY DEFECTIVE CHILDREN.**

9.30		9.30-9.50		10.0-10.15		10.30-10.45		10.45-11.15		11.15-11.30		11.30-12.0		1.30-2.0		2.0-2.15		2.0-3.0		3.0-3.15		3.15-3.30		3.30-4.0	
Assembly		Marking Registers (red marks)		Holy Scripture (Hymns and Repetition)		Drill		Marking and closing Registers		Dismissal		Assembly and red marks		Marking and closing Register										Prayers and Dismissal	
1	1	9.30	9.50	10.0	10.15	10.30	10.45	10.45-11.15	11.15-11.30	11.30-12.0	12.0	1.30-2.0	2.0	2.0-2.15	2.15	2.0-3.0	3.0-3.15	3.15-3.30	3.30-4.0						
2	2	Reading	Reading	Reading	Reading	Recreat'n	Recreat'n	Arithmetic	Mod. or Singing	Writing				(Girls) Knitting		Recreat'n	Recreat'n	Recitat'n	Drawing						
3	3	"	"	"	"	"	"	"	"	"				(Boys) Occupat'n		"	"	"	"						
4	4	Arith.	Arith.	Arith.	Arith.	Recreat'n	Recreat'n	Reading	Mod. or Singing	Obj. Less.				Occupation		Recreat'n	Recreat'n	Singing	Occupat'n						
5	5	"	"	"	"	"	"	"	"	"				(Girls) N'd'w'k		"	"	"	"						
6	6	Reading	Reading	Reading	Reading	Recreat'n	Recreat'n	Arithmetic	Mod. or Singing	Writing				(Boys) Occupat'n		Recreat'n	Recreat'n	Recitat'n	Drawing						
7	7	"	"	"	"	"	"	(Elder Girls) Cookery	" Singing	"						"	"	"	"						
8	8	Arith.	Arith.	Arith.	Arith.	Recreat'n	Recreat'n	Reading	Mod. or Singing	Obj. Less.				(Elder Girls) Laundry		Recreat'n	Recreat'n	Singing	Occupat'n						
9	9	"	"	"	"	"	"	"	"	"				(Younger Girls and Boys) Occupation		"	"	"	"						
10	10	Reading	Reading	Reading	Reading	Recreat'n	Recreat'n	Arithmetic	Mod. or Singing	Writing				Occupation		Recreat'n	Recreat'n	Recitat'n	Stories, etc.						

NOTES.—Occupations. CLASS I.: Needlework, Knitting (all kinds), Wool-work on Canvas, Rug-making, Freehand Drawing, Painting, Paper Flowers, Paper Folding, Cane Weaving. CLASS II.: Needlework, Knitting, Clay Modelling, Drawing, Painting, Paper Flowers, Paper Folding, Pricking and Embroidery. Wool-work. CLASS III.: Needlework, Knitting, Clay Modelling, Drawing (Free-arm and Chequered), Wool-work, Pricking and Embroidery, Paper Folding, Stick Laying, Mat Plating, Tablet Laying, etc. These constitute a double class under two teachers. Fourteen elder girls go to Cookery and Laundry. All these occupations are not taken in one week. Children are graded according to their attainments.

ABSTRACT OF TIME-TABLE OF A SCHOOL FOR PHYSICALLY DEFECTIVE CHILDREN.

	(Top) Class	(Lowest)		
	I.	II.	III.	
Pract. English				9.35—9.55. Scripture, Hymns, etc.
Grammar ...	25	25	25	9.55—10.15. Singing or Recitation alternately (Classes I. and II. combine and take Singing in the Hall while Class III. have Recitation, and <i>vice versa</i>).
Reading	135	135	140	
Recitation ...	70	70	80	
Writing and Dictation ...	50	50	50	
Arithmetic ...	140	140	135	10.15—10.45. First Lesson.
Drawing	55	55	55	10.45—11.0. Recreation.
Geography ...	25	25	25	11.0—11.5. Breathing Exercises.
History	25	25	25	11.5—11.30. Second Lesson.
Singing	80	80	70	11.30—11.55. Third Lesson.
Scripture	100	100	100	11.55—12.0. Preparation for Dinner, etc.
Recreation ...	75	75	75	
Nature Study	25	25	25	
Breathing Exercises	25	25	25	1.30—2.25 p.m. Handwork.
Handwork ...	375	375	375	2.25—2.35 „ Singing and Recit.
				2.35—3.0 „ Handwork.

NOTES.—Registers closed at 10.15 a.m., but may be closed at 10.30.

OCCUPATIONS.

Class I.	Class II.	Class III.
Drawing.	Drawing.	Drawing.
Painting, Design.	Painting.	Painting on Brown Paper.
Stencilling.	Macramé (Boys).	Modelling, leading to
Cardboard Modelling.	Fancy Work (Girls).	Cardboard Modelling.
Printing and Illuminating.	Rug Making.	String Work.
Knitting and Needlework (Girls).	Wool Mats.	Needlework and Knitting.
Embroidery.	Cane Work (Baskets, etc.).	Elementary Cane Work.
Crochet, and all kinds of Fancy Work.	Knitting.	Clay Modelling.
Cane Work.	Plain Needlework.	
Manual Training for each boy in this Class—one day a week.		

Gardening is taken at intervals with all Classes.

The Blind and Deaf.—By the Elementary Education (Blind and Deaf Children) Act, 1893, it is incumbent on every educational authority to provide an “efficient and suitable” education for blind and deaf children resident in the district. The same authority must also enforce the law of compulsory attendance, in the case of blind children from five to sixteen years of age, and in the case of the deaf from seven to sixteen years.

Separate schools are provided for these, which may be either day or residential schools. Both kinds are found in some educational areas. The children receive instruction in the ordinary school subjects—except that drawing is obviously not taught to the blind—particular attention being given to manual and industrial training, as deftness of hand and craft knowledge mostly form the only source of a livelihood when the school career is closed.

As these schools cannot be built within reasonable distance of *every* child's home, travelling expenses, in *day* school cases, are allowed to children living beyond walking distance from the school; and guides sometimes are also provided for those who are too young to travel alone. The blind children are now usually taught reading and writing on the Braille system. The manual training includes work in mat-making, clay modelling, straw-plaiting, rug and basket making, chair-caning, typewriting, woodwork, bent-iron work, and the domestic arts for girls.

In the case of the deaf the “oral” (or speech and lip-reading) system is generally adopted as the chief means of instruction. Sometimes the “combined system” is used, which includes the “oral” with manual signs. The manual training course comprises cane and cardboard work, stencilling, tailoring, boot-making, woodwork, and the usual domestic subjects for girls.

It is almost unnecessary to say that small classes in all

these "special schools" are essential to efficiency. Indeed, the official class limit for the *blind* is fifteen, and for the *deaf* ten.

An "after care" committee to safeguard the interests of these defective children, and especially to secure them suitable employment, when they have attained the leaving age has been found a useful institution.

It is worthy of note that a unique experiment is being carried out in Mannheim, where *intermediate* schools have been established—*intermediate*, that is, between the "special" and the ordinary school. These have been founded because (1) it has been shown that nearly ten per cent. of the children in the elementary schools are unable to keep pace with the progress of the scholar with average ability; (2) it is considered that such children need special educational and hygienic treatment; (3) it is further considered that the presence of these children in the same class with others of higher mental capabilities and better physique tends to retard general progress.

Accordingly under the "Mannheim system" the school is organised in three departments: (1) the normal classes with eight grades, (2) the backward classes—*Forderklassen*—with five or six grades, (3) the mentally defective classes with four or five grades.

There is no necessarily permanent attachment of scholars to the *Forderklassen*, as is mostly the case in the mentally defective department. With advancement in mental grip, the pupils are promoted from the intermediate classes to the normal department. In the *Forderklassen* the classes are limited to 30 pupils, whereas in the other two departments the numbers range from 48 to 50.

Of the few objections urged against this system, one is worthy of mention here, viz. "There is a tendency to

differentiate children solely on the basis of their intellectual capacity, and to neglect the other important problems of school life.”¹

Open-Air Schools.²—These schools, for many years a feature of the German educational system, are now recognised here, both official and voluntary agencies being at work in some areas to promote their development. All those immediately associated with elementary schools in poor localities cannot fail to realise that there are certain scholars there whose physical condition renders them unfit to profit fully by the instruction. Debility arising mostly from insufficient nourishment and impure air, and possibly also incipient disease, are generally the operative causes, and these usually imply intellectual retardation. It therefore becomes desirable to segregate these children, and as far as climatic conditions will allow, to give them the benefit of open-air training under conditions calculated to stimulate both physically and intellectually.

Accordingly, a suitable building and site being secured, boys and girls of this type, whose homes are within reasonable walking distance or tram ride, form, with the appro-

¹ Report by Dr. F. Rose.

² “One of the attractive features of the meetings of the British Association at Sheffield was a visit to an open-air school.

“The party arrived about three o’clock. ‘Hush,’ said the guide, ‘the children are resting.’ In a meadow a hundred deck-chairs were set out, in each of which sat a little boy or girl, wrapped in warm blankets, and looking very comfortable, though many were pitifully white and thin.

“The results of open air, regular feeding, and cleanliness are most encouraging. One little boy, who was fading away for want of food, gained 8 lb. in two months.

“There are 2,000 children in Sheffield schools who ought to be treated in this way, but at present there is room for only a hundred.”
—*The Little Paper*, October 1910.

TIME-TABLE OF AN OPEN-AIR SCHOOL.¹

priate staff, an open-air school for a period of four or five months in the year. Sheds are erected in the grounds where instruction can be carried on in wet weather, and where the scholars can take their afternoon siesta on deck-chairs provided for that and other purposes. The primary conditions of admission in one large educational area are (a) a certificate of suitability from the medical officer, and (b) a parental guarantee that the children shall not take any paid employment outside school hours. Measurements of each scholar are taken and recorded on entry and also at intervals.

Similarly, it has been found practicable to have *Play-ground Classes* in connection with ordinary schools when the conditions are favourable. The essential conditions may be said to be (1) a commodious playground with a south or south-eastern aspect, as little as possible disturbed by overlooking eyes or street traffic; (2) a covered shed for use in inclement weather; (3) recognition of the limitations imposed by winter, early spring, and late autumn.

Classes have thus been organised for delicate children when the full advantages of the open-air school are not available. These have taken two forms: (1) the collection of children of approximately equal attainments from neighbouring schools and forming them into a class in one central playground, and (2) the segregation of scholars from various classes in the same school for the same purpose.

Both these necessarily involve the services of an additional teacher. It has further been found equally practicable, without disturbing the organisation of a school, to have the playground in almost continuous use, during favourable seasons, either for one ordinary class, or for a series of such classes.

Higher Grade Schools.—Something has already been accomplished in the way of bringing elementary school aims nearer to those associated with the better class secondary school. This has been brought about by the establishment of *higher grade* and, later, “higher elementary” schools.

The higher grade schools have not, in many cases, had a proper opportunity of fulfilling their mission. Instead of placing these institutions on a solid foundation and making them capable of development and expansion, some of the late school boards, treading on uncertain ground, were content, in some cases, to take one or two senior departments of an ordinary school and convert them into higher grade departments without removing the lower standards. It was thus a conversion more in name than in reality. This type of higher grade school is gradually disappearing. Those, however, which started with an independent existence and gave exclusive attention to selected scholars have, as a rule, been a success. If higher grade schools are to continue as one of the crowning points of primary education, the following conditions are essential:—

(1) That each higher grade school must have an independent existence and be complete in itself, *i.e.* it must not form part of an ordinary school, and no particular department or school should have a special claim upon its accommodation.

(2) That the higher grade school should admit no children above twelve years of age, or below full Standard IV. attainments.

(3) That, as a rule, only those should be admitted to the higher grade course who show commendable industry and more than average talent.¹

¹ Exceptions to this are desirable in poor districts.

The advantages of higher grade schools of the best type are :—

(1) It is an incentive to industry for scholars in the ordinary school to know that successful devotion to work will enable them later to go to an institution of higher status and more advanced instruction.

(2) Scholars of ability are able to advance more rapidly when they are better classified, have highly skilful teachers, and are not retarded by the presence of children possessing average or below average capabilities.

(3) The higher grade school increases a child's opportunities of obtaining a scholarship and thus passing on to a secondary or technical school. It also improves his outlook and widens his views.

(4) Generally, the superior tone of a higher grade school, arising chiefly from the mutually stimulating effect of the stronger moral power possessed by scholars of firm mental calibre and previously recognised good conduct, is a most valuable force in forming character. These scholars must in turn influence others of their own social status with whom they are brought into contact.

(5) The higher grade department is a fitting transition school for those going later to trade or technical schools.

The higher grade school as considered here must not be confounded with the "Higher Elementary," which has official recognition as part of the elementary school system.

The Higher Elementary School.—A higher elementary school,¹ limited generally to 350 pupils, must be recognised by the Board of Education as such, and the curriculum, time-table, premises, and equipment must also be approved by the same central authority. The school must be organised to give a complete *three years'* course of

¹ Arts. 37-42, Code 1910.

graduated instruction : but a fourth year's course may be taken if specially sanctioned. Other main conditions of recognition are (1) the provision of special instruction bearing on the future occupations of the scholars; (2) special rooms and equipment for practical instruction; (3) H.M. Inspector must be satisfied that each scholar is qualified to profit by the kind of instruction offered; (4) each scholar must, as a rule, commence with the first year's course and proceed upward year by year; (5) the number of scholars habitually taught in a class should not exceed 40; (6) a progressive course of study in English language and literature, mathematics, history, geography, drawing; also manual training for boys, and domestic subjects for girls; (7) scholars must, as a rule, be twelve years of age at the time of admission.

The curriculum of a higher elementary school should be, in the fitting words of Mr. Morant in discussing the "French system of higher primary schools,"¹ "at once more limited in duration than that of the secondary school, more capable of assimilation by children of elementary attainments, and more immediately applicable to actual use at the desk, the counter, or the workshop, to which the great mass of the scholars are inevitably bound to go at as early an age as fifteen or sixteen."

The local authority, subject to condition (3) above, determines what shall be the means of admission to a higher elementary school. The practice, therefore, in this respect varies a little. The regular primary schools within reasonable distance are, as a rule, annually invited to nominate scholars for the neighbouring higher elementary school. These nominations usually exceed the number of vacancies. An examination is therefore held in some instances, and the most suitable children selected for

¹ Special Reports, Vol. I.

admission, the parents giving a guarantee that their children will remain at school to complete the course. In other cases, the final list of scholars is determined by an official of the local education authority in consultation with the head teachers immediately concerned. There is therefore, in this case, no formal examination.

A similar promise is usually exacted from parents when children are admitted from contributory schools to a higher grade department.

It is obvious, since the age and time limitation for each scholar in the higher elementary school is the close of the educational year in which he attains the age of fifteen, that each child *should* secure admission, as a rule, when not more than twelve years old, otherwise the conditional three years' course of instruction cannot be completed.

The advantages previously attributed to education in the higher grade schools apply with equal force to the higher elementary school.

Some differences between the higher grade and the higher elementary school have been already noted. Other differences are:—

(1) The higher elementary schools are mainly governed by special official regulations,¹ whereas the higher grade schools are governed by the same Code regulations as ordinary schools.

(2) The higher elementary schools whose constitution is determined by the Board of Education are much the same in character throughout the country; whereas the higher grade schools vary more or less in constitution according to the educational areas in which they are situated.

(3) In a higher elementary school a scholar must take each year's course in succession, unless the Board of Education specially sanction individual departures from

¹ Code 1910, Chapter VI.

this rule. In the higher grade schools a scholar may be promoted at the head teacher's discretion.

Generally the higher elementary department has proved a more satisfactory form of superior primary school than the higher grade department, probably because the latter has been unduly influenced in some areas by local conditions. It is possible, however, that the latter form may prove the more suitable in very poor and congested districts, where children almost invariably leave school at the earliest opportunity. It would be a gain, when the number of scholars in the upper classes of each school is small, to have a higher grade or higher standard department into which the whole of the scholars in the highest or the two highest classes could be drafted. If only a two years' course could be secured in this way, with the opportunity thus afforded for sound classification and specialised instruction, it would probably prove extremely valuable to the children concerned.

"Central Schools."—These have been established in the metropolitan area to take the place of the higher grade and higher elementary schools. They are intended to give an educational course that is not provided for either in the elementary or secondary schools. The bias of the curricula must be commercial or industrial or both, according to the needs of the locality; and the size of any class must not exceed 40 pupils. The courses of instruction must cover a period of four years; and boys and girls must respectively go through an approved course in manual training and domestic economy.

The managing bodies of central schools must be composed of (i) persons nominated by the Council; (ii) persons nominated by the managers of the contributing schools; (iii) one representative from the borough council in whose area the school is situated.

The elementary school pupils who will be less than 12 and not less than 11 years of age on 31st July in the year of admission, and who will be, as a rule, working in the fifth or higher standard at the time of examination, are eligible for admission to central schools.

Admission to central schools is based on—

(i) A declaration by the parent of the child seeking admission of his intention that the child shall remain in the school long enough to justify the change.

(ii) A recommendation of the head teacher of the contributing school which shall have regard to the whole school career of the pupil in question.

(iii) The managers' recommendation after interview with the parents or guardians of the children concerned.

A limited number of bursaries of an annual value not exceeding £10, tenable at the central schools, is awarded if parents of eligible candidates are unable "to meet the loss of wages and maintenance charges consequent upon the child's attendance" at a central school. The bursaries only operate at the age of 14; but the circumstances of each applicant for a bursary are considered before entry into the central school, and conditional promises are made by the Council.

The character of the building for a central school has been indicated under "premises."

The establishment of this type of school is the outcome of an attitude which is so well expressed in the following words:—

"There is a wide-spread feeling that it is of great importance, in the interests of the community at large, to give more attention to the development of 'practical' education in the elementary schools. Both educationists and men of affairs seem to concur in the view that education can be made more effective if the pupils can be taught

more by 'doing' and less by listening. It is considered that the intelligence of both boys and girls can be stimulated and trained not only by the imparting and acquisition of knowledge by means of books, but also by the exercise of hand and eye upon concrete objects. It is felt that a boy on leaving the elementary school should have had an all-round training of his faculties, and should have acquired that readiness and adaptability which will enable him to turn his hand to the task that awaits him in the workshop or factory. Working-class parents are themselves fully alive to the importance of obtaining this kind of training for their children, as is shown by the recent formation of the National Industrial Education League, which has for its object the promotion of a system of education for boys in the elementary schools which will enable them to hold their own in the industrial world. The formation of the various Trade Consultative Committees, which are now assisting the Council in its work of technical education, also shows the importance which the workers in the various trades attach to education. Another sign of the present trend of thought is given by the fact that a deputation from the metropolitan borough councils recently called attention to the importance of making education in elementary schools more practical."

The Committee regard this movement of public opinion as "an indication of the method which the Council should adopt in the organisation of the proposed schools. They should be schools which will give their pupils a definite bias towards some kind of industrial or commercial work while ensuring that their intelligence should be fully developed, and they should occupy a distinct position from the secondary school. They should avowedly frame their curricula with a view to the pupils leaving at an age between 15 and 16. Their courses should be so framed

as to provide for the pupil the best possible equipment for entering upon the industrial or commercial world as soon as he leaves school, while at the same time qualifying him to enter upon a special course of training for some particular industry at a polytechnic or similar institution, if he desires to continue his education further."¹

In most of these superior primary schools the instruction is organised on a three or four years' basis. Generally, however, comparatively few scholars remain to complete the fourth year course. The classification of the pupils rests on these annual courses, which are carefully correlated.

It is usual to allow a fairly liberal staff, one that enables the organiser to attach a teacher to each class; and in a school of about 300 pupils and upwards still to have, at least, two other members of the staff free for laboratory work or art teaching. Generally, too, each class master or mistress is a specialist in one subject which he or she teaches in every part or some parts of the school: so that specialisation may be said to play a dominant part in the instruction. Most schools of this type have a definite bias which is either wholly commercial or industrial. In some cases, however, the bias is predominantly commercial, with a smaller section industrial, or *vice versa*.

Whatever the bias, the organiser should be guided by certain general principles in determining the curriculum, syllabuses, courses, and the proper distribution of time over the various subjects. Many of these principles are indicated in connection with the discussion of time-tables for the ordinary school; but with regard to the type of school now under consideration, there is a danger of loss of balance in the training if the claims of the bias are not adjusted to general needs.

¹ Extract from the Report of the Education Committee of the L.C. Council, 1910.

The following principles should therefore operate in drawing up the time-table:—(1) The education should be broad enough to enable the scholar to adapt himself to any occupation. (2) The courses and general method having been definitely settled and adjusted to the end in view, disturbing factors, such as preparation for examinations, should not be introduced. (3) A modern language should, as a rule, be included in the curriculum, and not less than three hours a week devoted to it. (4) Every boy and girl should go through an approved course of handicraft and domestic economy respectively. (5) Scripture instruction should be given daily. (6) Arithmetical operations in connection with simple account-keeping—but not set forms of book-keeping—should form part of the curriculum. (7) Shorthand and typewriting should not be included in the courses of instruction, even in schools with a commercial bias, until the third and fourth years of training are respectively reached.

The following are abstracts of time-tables in operation at highly successful schools:—

HIGHER GRADE SCHOOL.—BOYS' DEPARTMENT.

TIME-TABLE.

SUBJECTS OF INSTRUCTION.	1ST YEAR.	2ND YEAR.	3RD YEAR.	4TH YEAR.
	Hr. Min.	Hr. Min.	Hr. Min.	Hr. Min.
Reading	1 0	1 0	1 0	1 0
English, Composition, Spelling, Grammar, Literature	5 30	5 30	4 0	4 0
History	1 30	1 30	1 30	1 30
Geography	1 30	1 30	1 30	1 30
French	3 0	3 0	3 0	3 0
Mathematics	5 0	5 0	5 0	5 0
Chemistry, Theoretical	1 0	1 0	1 0	1 0
„ Practical			1 30	1 30

Drawing, 2 hr. ; Singing, 1 hr. ; Scripture, 2 hr. 30 min. ; Physical Exercises, 1 hr. ; Recreation, 1 hr. 40 min. ; Registration, 50 min.

HIGHER GRADE SCHOOL.—GIRLS' DEPARTMENT.

TIME-TABLE.

SUBJECTS OF INSTRUCTION.	1ST YEAR.	2ND YEAR.	3RD YEAR.	4TH YEAR.
	Hr. Min.	Hr. Min.	Hr. Min.	Hr. Min.
Arithmetic, inc. Mental and Practical work	4 0	3 50	3 20	3 0
English Subjects, inc. Literature and Comp.	6 30	5 20	5 0	5 0
History ...	1 0	1 10	1 10	1 10
Geog. and Mapping ...	1 0	1 20	1 20	1 20
Drawing ...	2 0	2 0	2 0	2 0
Needlework ...	2 10	2 0	2 0	1 30
Science, inc. Hygiene ...	0 40	0 40	0 40	0 30
Nature Study	0 40	0 40	1 10	1 30
Experimental in Lab. ...		1 0	1 0	1 30
French ...	3 0	3 0	3 0	3 0

Domestic Subjects.—Average 2 hr. 45 min. per week. Deduction spread over the above subjects according to the day, a.m. or p.m.

Registration ...	30 min. weekly.
Scripture ...	2 hr. 30 min.
Recreation ...	1 hr. 40 min.
Physical Exercises ...	1 hr.
Singing ...	1 hr.

HIGHER GRADE SCHOOL.—MIXED DEPARTMENT.

TIME-TABLE.

SUBJECTS OF INSTRUCTION.	1ST YEAR.		2ND YEAR.		3RD YEAR.		4TH YEAR.	
	B.	G.	B.	G.	B.	G.	B.	G.
English ...	4-45	4-30	4-45	4-0	4-30	4-30	4-30	4-30
Mathematics ...	4-45	3-45	4-45	3-40	4-30	4-0	3-30	3-30
Geography...	1-30	1-15	1-30	1-20	1-30	1-30	1-30	1-30
History ...	1-30	1-40	1-25	1-30	1-30	1-30	1-15	1-30
Science ...	2-0	1-30	2-45	2-10	3-25	3-0	4-0	4-0
French ...	3-0	3-0	3-0	3-0	3-30	3-30	4-0	4-0
Drawing ...	2-20	2-20	2-20	2-20	1-0	1-45	1-0	1-20
Prac. Geometry and								
Mech. Drawing...	40		45		1-20	50	1-30	1-0
Singing ...	45	45		45		45		45
Manual Training ...	2-20		2-20		2-20		2-20	
Needlework ...		2-30		2-30		2-15		1-30
Domestic Subjects.		2-20		2-20				
Home Work, Exam.								
and Setting ...	1-15	1-15	1-15	1-15	1-15	1-15	1-15	1-15

Physical Exercises, 1 hr. ; Recreation, 1 hr. 40 min. ;
Scripture, 2 hr. 30 min.

HIGHER ELEMENTARY SCHOOL.—MIXED DEPARTMENT.

TIME-TABLE.

SUBJECTS OF INSTRUCTION.	1ST YEAR.		2ND YEAR.		3RD YEAR.		4TH YEAR.	
	B.	G.	B.	G.	B.	G.	B.	G.
French ...	3-0	3-0	3-0	3-0	3-0	3-0	3-0	3-0
English Subjects ...	4-0	4-0	4-0	4-0	3-30	3-30	3-30	3-30
History ...	2-0	2-0	2-0	2-0	2-0	2-0	2-0	2-0
Geography...	2-0	2-0	2-0	2-0	2-0	2-0	2-0	2-0
Mathematics ...	4-0	3-0	4-0	3-0	4-0	3-0	4-0	3-0
Practical Science ...	2-0	1-40	2-0	1-40	3-0	2-10	3-0	2-10
Drawing ...	2-0	1-0	2-0	1-0	2-0	1-30	2-0	1-30
Music ...	1-0	1-0	1-0	1-0	30	30	30	30
					(Choir)		(Choir)	
Man. Training (B.)	2-20		2-20		2-20		2-20	
Needlework (G.) ...		2-20		2-20		2-20		2-20
Dom. Subjects (G.)		2-20		2-20		2-20		2-20

Drill, 1 hr. ; Scripture, 2 hr. 30 min. ; Recreation, 1 hr. 40 min.

Note.—The Science for the Girls to be correlated with the Domestic Subjects.

CENTRAL SCHOOL FOR BOYS.

SUBJECT.	1ST YEAR.	2ND YEAR.	3RD YEAR.	4TH YEAR.
	Hr. Min.	Hr. Min.	Hr. Min.	Hr. Min.
Recreation	1 40	1 40	1 40	1 40
Scripture	2 30	2 30	2 30	2 30
Algebra	1 20	1 40	1 40	1 20
Geometry	1 20	1 40	1 20	
Arithmetic (a)	3 0	2 40	3 0	3 40
Eng. Gram. & Comp. ...	2 40	2 20	2 20	2 40
Readg., Rec., & Liter. ...	1 20	1 20	1 40	1 40
History	1 20	1 20	1 20	1 20
Geography	1 40	1 40	1 30	1 20
French	3 20	3 20	3 50	3 50
Science	1 50	1 50	1 20	
Physical Exercises	50	50	1 0	50
Singing (b)	40	40	40	40
Manual Training	2 20	2 20		
Drawing	1 0	1 0	1 0	1 0
Shorthand			2 0	2 20
Business Methods				2 0
Writing and Spelling ...	40	40	40	40

(a) Including business accounts.

(b) Or Private Study *fd.* those whose voices are breaking.

General Note.—In all these Time-tables, whether the subjects are specified in the abstracts or not, Manual Training for Boys and Domestic Economy for Girls are taken. Where not specified, they are taken at the expense of one or more other subjects named in the table.

**TIME-TABLE¹ FOR A HIGHER ELEMENTARY PRUSSIAN
SCHOOL (BOYS').**

SUBJECTS OF INSTRUCTION.	NUMBER OF WEEKLY HOURS.					
	(Highest.)			(Lowest.)		
	I.	II.	III.	IV.	V.	VI.
Religion	2	2	2	3	3	3
German, incl. Reading and Writing.	4	6	8	12	12	12
Arithmetic	3	3	3	5	5	5
Elements of Geometry	3	2	2	—	—	—
Natural Science	2	2	2	—	—	—
Physics (Chemistry)	3	2	—	—	—	—
Geography	2	2	2	2	—	—
History	2	2	2	—	—	—
French (or English)	5	5	5	—	—	—
Drawing	2	2	2	2	—	—
Singing	2	2	2	2	2	2
Gymnastics	2	2	2	2	2	2
Total	32	32	32	28	24	24

The superior primary schools of Germany are similar to some of the higher grade type (not the higher elementary) in this country, inasmuch as the lower classes correspond to those in the ordinary primary school. In France, however, the *Écoles primaires supérieures*² are built somewhat on the lines of the higher elementary here. A pupil of the regular elementary school, having obtained the *certificat d'études* (leaving certificate), can go to the superior

¹ See *History and Organisation of Public Education in the German Empire*, by Dr. Lexis.

² See Special Reports, Vol. 7.

primary school for a three years' course of instruction. During the first year the instruction is of a *general* character, but for the second and third year pupils the curriculum is divided into three sections or courses, to any one of which the pupil must give his exclusive attention. These courses are designated (1) the Commercial, (2) the Industrial, (3) the Agricultural. Theory and practice are judiciously blended. There is no attempt to teach a business or trade. The idea is, in the closing years of school life, that a child should have an opportunity, under careful guidance, of developing his powers on the lines suitable to his particular bent.

In Holland the Burgher and Higher Burgher schools occupy an intermediate position between the regular elementary and the higher secondary schools (*Gymnasia*). The curricula, however, of the Higher Burgher schools are generally of a more ambitious type than that of the higher elementary schools in this country.

The Contributory School.—The Contributory school, being a regular elementary school with its seven or eight grades or standards, holds relatively to the superior primary school a position of remote subordination, inasmuch as the finer material in its upper classes is subject to requisition. The novelty of this position, when first created, naturally led to heart-burnings on the part of some of the teachers of the Contributory schools. On the whole, however, they displayed a worthy public spirit by the way in which most of the superior schools were supported, when time had smoothed away the earlier apprehensions. It was recognised that though the Contributory system had its defects, the educational gain, by the transfer of selected scholars to the superior primary school, outweighed them many times.

There can be no doubt that the child who migrates from school to school suffers by the change in many ways; but this does not apply to the passage of the older children from the ordinary to the superior primary school. The means of minimising the educational loss caused chiefly through capricious or necessary migration is one of serious moment. Various partial remedies have been suggested:— (1) The adoption of a uniform educational year for all schools; (2) A practically uniform curriculum for schools in the same educational area; (3) An organised system promoted by the local education authority to prevent capricious migration from school to school.

The Continuation School.—This term, as understood here, applies to both day and evening classes that provide for technical or general training, or for the *continuation* of a pupil's education, after leaving the regular day school. The whole of these classes may be divided into (1) Day classes, (2) Evening classes, (3) Correspondence classes.

(1) *Day Classes.*—The Day classes have mostly been established at technical institutes for the use of artisans and apprentices in skilled trades, the employers co-operating with the educational authority for this purpose. In England the general and intimate connection between the industries on the one hand and education on the other, such as exists in America, is mostly wanting. There is, however, evidence that this country is awakening to the importance of the link since attention has been so forcibly directed to the practice of other countries in this connection.

Thus in several large towns certain employers of labour are allowing apprentices likely to profit by a course of special training to attend suitable classes during the day at the technical institutes, attendance at such classes being deemed practically equivalent to attendance at the works.

Middlesborough, Birmingham, Swindon, and Woolwich may be cited as examples. Exhibitions, too, in various subjects, instituted by some local authorities, provide for free education in approved evening classes.

The Woolwich Arsenal authorities have co-operated with the governors of the Polytechnic in the district in order to insure the proper technical training of lads engaged in the Royal Arsenal. During the first three years of apprenticeship a lad receives instruction in prescribed subjects at the Polytechnic during one afternoon and three evenings a week, the minimum time being ten hours. Regularity of attendance, good conduct, and sound application are insisted upon. Each lad pays a small annual fee to cover instruction, cost of books, drawing outfit and paper, such fees being refunded by the Arsenal authority if attendance and progress have been satisfactory throughout the year. Attendance is also compulsory in the fourth year, but is confined to the evenings only and a choice of studies is then permissible, as seen below.

FOURTH YEAR COURSE.—Three evenings per week for forty weeks. *Subjects*—Lads will make a choice from the following subjects, the course of study to be approved in each case by the Principal of the Polytechnic:—Practical Plane and Solid Geometry, Mechanical Engineering, Electrical Engineering, Mathematics, Mechanics (Theoretical and Applied), Experimental Physics (Sound, Heat, Optics, Electricity, Magnetism), Chemistry, Metallurgy, Building Trades subjects, and such other subjects as may be approved from time to time.

In the laboratories the lads work in pairs, but each one must keep, in a book provided for the purpose, a record of the experiments made. The Principal of the Polytechnic sends weekly reports on each lad's conduct and work to the chief superintendent of the Arsenal.

In order to encourage home work and to insure its being done under favourable conditions, a room is reserved for the lads at the Polytechnic and a teacher placed in charge of it. This supervision, besides quietude of study, secures assistance to individual students who may stand in need of help. This work of preparation involved in private study is compulsory and is included in the ten hours already mentioned.

It is now recognised that technical schools should get into touch, and maintain intimate relations, with those employers whose apprentices and workmen are likely to profit by a course of technical training. Such employers can, as a rule, tender valuable advice concerning the kind of studies desirable for their employees.

In a town in the north of England a number of apprentices are set free from their employment at certain times in order that they may attend classes specially arranged for them in the local technical school in engineering and allied trades; the courses extend over two sessions of eight months each; students in their first year attend for one morning and one afternoon a week, and those in their second year for two afternoons a week, or four hours in all. The fees are paid by the employers; the apprentices pay for books and materials, but receive their wages for the periods of absence from work granted to enable them to attend the classes. The time spent by apprentices in attendance at the day classes is counted in their term of apprenticeship, and preference is given by the employers in filling vacancies in their works to those who attend the classes. The employers are represented on the governing body of the technical school.

The local education authority at a railway centre in the south of England has provided in the technical institute classes for engineering apprentices in the employment of

the railway company. The apprentices are allowed to attend a four years' course, arranged in the case of the first year of instruction for $2\frac{1}{2}$ hours for one morning a week, and in the case of the second, third, and fourth years for $3\frac{1}{2}$ hours a week, spread over two mornings. Again, at a railway centre in the north of England, the technical school carries on a course on the construction and management of the locomotive to meet the requirements of the engine drivers, firemen, and engine cleaners; the instruction is for two hours on one morning a week.

In a centre of chemical manufacture special arrangements are made for the instruction of trade apprentices of large engineering and chemical works. In the case of one firm the employers require that their employees shall attend an evening school until they are 19 years of age; but some of the apprentices of this and of another firm are allowed to attend for instruction for four hours on two afternoons a week for 40 weeks in the year during the last two years of their apprenticeship, without loss of wages during their absence from the works; the employers pay the fees for these classes, and attendance there is regarded by them as a very important part of the apprenticeship.

In a large industrial centre the local education authority has provided apprentice day courses for engineering, plumbers' work, and painters' and decorators' work; the various courses range over two or more years and involve attendance for one whole day a week throughout the year.¹

Day classes at technical institutes are also available for those who, before assuming the responsibilities of apprenticeship, desire to go through a course of specialised instruction relating to the trade or technical profession they propose to adopt.

¹ *Vide* Report of the Board of Education 1908-1909.

Such institutions afford systematic instruction in day classes in courses extending over two or more years, and adapted for the preparation of young men for employment in connection with the trades, manufactures, and commerce of the country; they also provide the higher courses of specialised instruction in science in relation to particular industries. Corresponding provision is made for advanced instruction in art in the daytime, under conditions which lend themselves to the arrangement of courses of instruction aiming at the preparation of students for work connected with the applications of art to the industries.

(2) *Evening Schools*.—These necessarily vary in kind according to diversity of conditions in various localities. Roughly, for the larger centres of population, the evening schools may be classified under—

- (i) *Ordinary schools*, meeting generally three or four times a week from 7.30 to 9.30 p.m.
- (ii) *Commercial schools*, meeting generally five evenings a week from 7 to 10 o'clock.
- (iii) *Science and Art schools*, meeting generally five evenings a week and on Saturday mornings.
- (iv) *Technical Institutes and Polytechnics*. Day and evening classes.
- (v) *Schools of Art*. Day and evening classes.

As a condition precedent to the earning of grants, these schools must conform to the Regulations of the Board of Education for technical schools, schools of art, and other forms of provision for further education. These regulations are to some extent wide in order to enable local authorities to establish classes suitable to the economical conditions and industrial needs of the district.

Students may not be registered for grant-earning pur-

poses who are under twelve years of age, or who are earning grant under other regulations of the Board.

The organisation of *ordinary* evening schools has been generally based on subjects of instruction, each class being, as it were, a miniature school in itself. The courses of instruction have been either mostly directed to the improvement of the general education, or confined within the narrow channels of purely vocational claims, and usually arranged to cover a session of seven or eight months' duration. While plans of this nature are serviceable up to a point, they generally involve much dissipation of energy, because that sustained interest is missing which accompanies a broader based and more organised course of study. Organised courses extending over periods from two to four years are therefore gradually becoming the dominant feature in evening school organisation. The one-subject basis is no longer a tenable one, and must be displaced by the organised course, which may now be regarded as the unit in evening school classification.

The name Commercial schools suggests the subjects of instruction. They aim at such preparation as will enable pupils to qualify for commercial life, or at the extended usefulness of those students already engaged in it.

The Science and Art schools generally arrange specific courses of instruction in the various sciences, etc., recognised by the Board of Education. Laboratory or practical work supplements the theoretical lessons. No provision is made, as a rule, for technical instruction on the lines of trade classes.

The technical institutes and schools of art, on the other hand, generally specialise in the direction of trade classes and in art training as applied to the industries. Many

polytechnics, however, include in their curricula such subjects as are taught in the commercial schools, and also, in a more advanced form, many of the subjects taught at the science and art schools.

It is interesting to note that Messrs. Brunner, Mond and Co., of Cheshire, have made it a rule not to employ any boy unless he has passed Standard VI. and undertakes to attend an evening school until he is 19 years of age. This firm's determination has had a salutary effect upon the youths in the neighbourhood in the way of encouraging evening education.

There should, of course, in every district, be a complete link and a well-defined co-ordination between various evening institutions, and provision made for the educational needs of every section of the community.

Some means of linking the Day with the Evening School:—

(i) That the first step in linking the day and evening schools should be to secure effective co-operation from the head teacher of the day school, who should accept some measure of moral responsibility for the immediate passage of his scholars to the evening classes.

(ii) That children in attendance at day schools should be allowed to attend the ordinary evening schools, provided they have attained the age of 13 on July 31st preceding the opening of the evening schools, or are exempt from attendance at day school, though actually in attendance there, the conditions being—

(a) That they be admitted free of charge.

(b) That the consent of the head teacher be given to the child's attendance at evening school.

(c) That the time of attendance be limited as a rule to two evenings a week.

(iii) That scholars who are legally exempt from further attendance at day school should be admitted free to an ordinary evening school on the recommendation of their head teacher, provided they join that evening school within one month of the earliest possible date after leaving the day school.

(iv) That children who have obtained a leaving certificate from a higher elementary school or higher grade school having no standard below the fifth, and who are certified by their head teachers as being qualified to profit by the teaching afforded in a commercial centre, be admitted to the centre without payment of fees; provided application for admission is made within one month of the earliest possible date after leaving the higher elementary or higher grade school.

(v) Co-operation should be secured through old scholars' clubs, brigades, school newspapers, etc., associated with the day school.

(vi) A list of evening schools in the immediate neighbourhood, with subjects generally taught and conditions of admission thereto, should be placed on a board to be fixed in the hall, corridor, or senior class-room of the day school.

(vii) The head teacher and staff should seize seasonable opportunities for directing the attention of scholars to the evening schools.

(viii) A small pamphlet on the evening schools, setting forth reasons which should induce boys and girls to continue their education, would be valuable. Examples should be cited how men and women have become a great force in the State through continuing their education in the evenings. This pamphlet should be placed in the scholar's hands at the beginning of the last year at the day school.

(ix) As far as possible scholars should be encouraged to attend that evening school to which their day school is contributory.

(x) Day school scholars in their last year might be invited occasionally to attend lantern and other lectures on interesting subjects at the evening school.

(xi) At day school prize distribution meetings the attention of the scholars should be always directed to the evening classes. The managers should be requested to co-operate on these and other points concerning the continuance of education in the evenings.

(xii) The head teacher of the day school should forward a list of scholars once a month to the responsible teacher of the evening class, the list to include those scholars who will be 14 years of age during the following month, and others who, in the opinion of the head teacher, will be leaving about that time.

(xiii) The head teacher and the responsible teacher of the evening school to which the day school is contributory should endeavour to interview the parent during the last month of the scholar's attendance at the day school with a view of securing the parent's co-operation in evening school attendance.

(xiv) Exhibits of work done in the evening school should be shown in a case placed in the hall, corridor, or senior class-room of the day school.

(xv) Each ordinary evening school should be so functioned as to meet generally the further educational needs of the great majority of the scholars in its contributory day schools.

(xvi) Monthly popular lectures in connection with each evening school or group of schools are desirable, to which parents and day school scholars might be admitted on certain conditions.

(xvii) There should be perfect co-operation between the head teachers of the day schools and the responsible teacher of the evening school to which the day schools are attached. Occasional conferences between these officers are desirable.

(xviii) The responsible teacher should notify the head teacher of the day school of a scholar's first attendance at the evening school.

Some Continuation Schools Abroad.—In the United States manual training and trade schools reach a high state of perfection. The close relationship between the technical institutes and the industries, and the determination of employers to have their apprentices thoroughly educated, make educational and industrial progress comparatively easy. The Baldwin Locomotive Works in Philadelphia,¹ for example, "take apprentices at 17 for four years, who must have had 'a good common school education'; they are required to attend night schools during the first three years of their apprenticeship."

An apprentice of the second class must have had a high school training, including the mathematical courses usual in such schools. He must attend night schools for the study of mechanical drawing for at least two years unless he has already sufficiently acquired the art.

Free evening lectures are given in the public schools of New York. These are largely attended by adults. Discussion is encouraged, and the free libraries of the city co-operate to lend books to the auditors who desire to enter more deeply into the subject of the lecture.

In many parts of Germany² attendance at the evening

¹ Report of Mosely Education Commission.

² See Special Reports, Vol. 9, Continuation Schools of Berlin; also Board of Education's Educational Pamphlets, No. 18. "At

school is compulsory from 14 to 16, or 14 to 18, years of age, unless the student has already reached a satisfactory standard of educational attainment. This compulsion is of a stern type, for the student must learn, and the employer is forced to give the time necessary for it. From the ordinary evening schools of Berlin have grown such institutions as the "*Handwerkerschulen*," which, as the name implies, are schools for apprentices and artisans. In many of the trade schools there are courses of instruction extending over a period of four years. These courses are so arranged that attendance at the lessons need not be continuous throughout the year. An artisan, for example, could attend during the winter months only, and give up the summer months to the practical work of earning a livelihood, and so complete the full course of instruction in this alternative way. The ordinary German

Strassburg, on leaving school at the end of his fourteenth year, a boy must at once, whether he has already found work or not, join one of the following, and a statement to that effect appears on his leaving certificate:—(a) The General Continuation Course (for unskilled workers). (b) One of the Technical Courses (*gewerbliche*). (c) One of the Courses for Building or other Industries. (d) The Commercial Course."—Educational Pamphlets, No. 18.

Also, "as the time for his leaving the day school draws near, the town authorities and his teachers show their interest in the boy's choice of a calling. The parents will perhaps have been invited to an informal conference, to have the intention and procedure of the Labour Bureau explained to them, and they will have received a pamphlet informing them of the various trades and employments in the district, and the prospects in each. No pressure is exercised on them as to the choice of an occupation, but the school does sufficient to awaken them to the evil of letting their children drift into irregular employment, and the authority of the schoolmaster is exerted to insist on the children going to the bureau repeatedly till they have found a post."—Educational Pamphlets, No. 18, *Compulsory Continuation Schools in Germany*.

evening schools are much the same as those in the large towns of the north of England.

Holland shows a similar enterprise to Germany in the establishment of trade schools with day and evening sections, and of other continuation schools of a commercial and general character.

THE ORDINARY ELEMENTARY DAY SCHOOL.

Teachers Giving Partial Time or Visiting Teachers.

—Exigencies of school life sometimes demand the employment of occasional teachers for certain subjects. In the case of a mixed school presided over by a master and without the permanent aid of an assistant mistress, a woman must be employed to give the necessary instruction in needlework. In like manner, a drill instructor is sometimes engaged to superintend the physical side of the scholars' training.

Of recent years there has been a tendency towards specialisation in certain subjects. Visiting teachers have therefore greatly increased in number. These are mostly employed in giving instruction in science, art, and modern languages, their work being supplemented by members of the ordinary staff. This arrangement, however, cannot be considered satisfactory. The visiting teacher is necessarily too remote to be effective. It would be far better if each member of the permanent staff specialised in one subject.

Pupil Teachers.¹—Pupil teachers, who must be over 16 and not over 18 years of age—with exceptions in favour

¹ See Schedule II. B, Art. 11 (a), Code 1910, and *Regulations for the Preliminary Education of Elementary School Teachers*, Chaps. I to V.

of rural districts—are normally recognised for a period of two years. They must be (a) trained in teaching in a public elementary school, and (b) instructed at a secondary school or elsewhere, as approved by the Board of Education. They must have one whole day in each week “free from employment or other requirement.” Otherwise it is the official expectation that the pupil teacher’s time shall be fairly equally distributed between training in teaching and instruction. Arrangements for the training and instruction of pupil teachers have varied so much in different educational areas that it is not proposed to summarise them here. The practice in large towns has generally been, however, fairly uniform, the pupil teacher spending one half of the week in school and the other half at the secondary school or pupil teachers’ centre, with minor holiday intermissions. In lieu of this plan, the “block system,” by which a term or half-year devoted wholly to training in school is alternated with a corresponding period given up entirely to academic studies, has been introduced in some educational areas.

But whatever system is adopted, it is eminently desirable that theory on the academic side should fit in with the actual work of training at the school.

The regulations of the Board of Education are intended to secure for the pupil teacher a more complete and continuous education, and to make the period of service in an elementary school a time of probation and training rather than of too early practice in teaching.

It is undesirable for pupil teachers to be held entirely responsible for a class. The staff should be sufficient and suitable without this aid, and the school should, of course, be adapted to the requirements of their training. At the same time practice in teaching is essential. This can be secured by a systematised course of criticism lessons,

and by allowing the pupil teacher to have charge of a small portion of a class for a short time under the direct supervision of the head teacher or a certificated assistant.

When not thus engaged, he should have as much variety of teaching as possible with other classes, the upper sections being generally excepted, and be brought into close contact with school routine. Listening attentively to the class teachers and carefully noting their methods is a valuable exercise—a foundation on which to build; but this type of exercise must have strict limitations put upon it. Without a sense of increasing responsibility and growing power in the management of children and a fair knowledge of the conditions of general and individual progress, the training of a pupil teacher in the art of teaching cannot become a reality. A properly graduated course of school training, increasing in difficulty and scope as the article time advances, should be a part of the working scheme of every school having pupil teachers: "Registers" showing the time spent by each pupil teacher in employment or training," and full records of its nature, must be kept by the head teacher of the school.

Definite times should be assigned for *observation* arranged on a consecutive basis. All lessons thus observed should be analysed by the pupil teacher; and in this analysis the aim of the lesson, the method employed, and any other material points should be indicated. In examining this report of the pupil teacher, the class teacher should see that the relationship between the different parts of the lesson is appreciated—the adaptation of method to aim in its application. Practice in actual teaching to sections of a class or to a whole class, in the

¹ Schedule II. B. (11). See also under "Student Teachers" suggestions for the distribution of time in school.

form either of a criticism lesson founded on rough notes, or of the repetition of a lesson already given by the class teacher, is, of course, necessary : and this practice should as far as possible represent a connected series. In the earliest stages of training *whole* lessons should not be given, but only *parts*, the class teacher coming in, at an appropriate time, to continue the teaching.

Indeed the whole scheme of work for the pupil teacher must be thoughtfully designed to cover the full course of training. The parts should be so connected that each will naturally lead to the other, and both *a priori* and in their finality reveal an organised unity.

Pupil Teacherships of Handicraft are recognised in some educational areas. There are also Domestic Economy and Art Pupil Teacherships.

Student Teachers.¹—These may form part of the staff subject to certain provisions imposed by the Board of Education. Foremost amongst these provisions are: (1) The local authority must put into operation a satisfactory scheme for the supervision of student teachers and their training in the art of teaching. (2) Each student teacher, if not a bursar, must be over 17 years of age. (3) He or she will be generally recognised for one year, but this recognition may be extended to two years. (4) Attendance at school may not exceed eight meetings in any one week. (5) The head teacher must keep registers showing the time spent in training and "full records of the manner in which it was employed." (6) He or she must have passed the Preliminary Certificate Examination or "some other examination accepted by the Board as a qualification for entrance to a Training College."

¹ Arts. 11 and 12, Code 1910, and Chaps. VI. and VII., *Regulations for the Preliminary Education of Elementary School Teachers.*

Distribution of time spent in school might usefully take the following form for a year's course—

A criticism lesson at least once a week, to be followed by advisory remarks of the head teacher on method and disciplinary effects.

First Term:—Half time in **observation** and the other half divided equally between **practice with the class teacher** and **independent¹ practice**.

Second Term:—One-third of time given to each of the following—**observation**, **practice with the class teacher**, **independent practice**.

Third Term:—One-fourth of time to **observation**, half time to **independent practice**, one-fourth to **practice with class teacher**.

On the academic side, student teachers must attach themselves to a training college or kindred institution that becomes responsible for the direction of their studies and to some extent for the supervision of their training.

It is a fairly general practice to allow the student-teacher to work, by turns, in nearly every class. Considering the short period of training, this is not desirable. There should at least be an *anchorage class* in charge of one of the most capable assistants, where the student teacher should spend about one-half to three-fourths of his or her time, the remaining time being devoted to other classes and to the acquirement of a knowledge of school records and general routine. Under other arrangements than these the work becomes too diffused; and accordingly impressions cannot be deep and lasting, nor can the training be really effective.

¹ "Independent" is not necessarily used in the absolute sense. It refers here to the charge of a complete class under competent supervision, which may or may not be operative, or to the charge of a section of a class.

The distribution of time¹ over the various phases of class life suggested above is intended to meet all ordinary cases. Sometimes, however, a student teacher shows at once a natural aptitude for teaching and an exceptional power of control over children. In such cases, less time should be given to *observation* in the first term, and more time to actual working practice.

Absences of Teachers.—The absences of teachers through illness and other transient causes are generally disturbing elements in the life of a school. The extent of the disturbance, however, depends greatly on the numerical and qualitative strength of the staff. The department that is staffed only up to minimum requirements naturally feels these disturbances most; whereas generous staffing arrangements enable the head teacher to fill up the gap promptly. If the head teacher is not otherwise tied to a class it is his duty to fill the vacant position, supposing no other qualified member of the staff is available.

It, however, often happens that the hands of each teacher are otherwise full; and as a class must be controlled and taught, it becomes necessary to devise some temporary expedient for meeting the emergency. Such expedients must, of course, vary according to circumstances. In practice they often involve a departure from the time-table, which should be avoided if possible. All departures from the time table, by the way, should be logged and the circumstances stated. It goes without saying that the wisest course to pursue is the one that involves the least deviation from every-day practice, and also fairly meets the needs of the teacherless class.

¹ This might apply equally to pupil teachers, with slight modifications to meet individual cases.

This is generally effected by an alternation of private study (or any quiet individual work such as writing and drawing) and class teaching in two adjoining classes, the one teacher, with such minor aids as are ordinarily available in a school, distributing oral lessons over the two classes, and also guiding private effort and testing its results as far as possible. The occasional practice of putting two classes into one room and overcrowding it, must be condemned. When, however, a commodious room is available into which the two classes can be conveniently put, oral lessons might be given to the combined class in certain subjects, if the attainments of scholars are not widely different; or, as in the other instance, private study and oral lessons might alternate.

Other devices are sometimes practised, under stress of circumstances, not always in conformity with the letter of official regulations. The main thing, however, is the spirit of these regulations, which should be scrupulously observed. It is pleaded in these cases that necessity knows no law, and that an unduly severe view cannot be taken of an exceptional position of a temporary character that has, all things considered, been met in a reasonable manner.

Supply Teachers.—The inconveniences caused by the absences of teachers point to the wisdom—when there is no organised system of “supplies,” prompt to fill up vacancies, especially sudden and unexpected ones—of giving each department a marginal or liberal staff. This is apparently done to a large extent in the United States. “It is universally recognised that teachers should not be actually teaching all through the school day: 20 or 22 periods of actual teaching out of 30 seem about the general rule.”¹ Again, Mr. G. Andrew, in his Report to the Scotch

¹ Mosely Education Commission Report.—W. G. Fletcher.

Education Department on the Schools of Berlin and Charlottenburg, says, "A teacher gives, as a rule, from 24 to 28 hours' instruction in a week, out of a possible 32 hours."

Non-provided schools have suffered more through the absences of teachers than the Council schools, because the latter, in most large areas, have the advantage of a system of "supply" teachers. But now that both Council and non-provided schools are mostly under the direction of the same local authority, which is either directly or ultimately responsible for their efficiency, there is no reason why both classes of schools should not equally profit by an organised system of "supply" teachers. Indeed this is generally so now. In the metropolitan area "supplies" consist of—

- (1) "Unattached" teachers, practically in the permanent service, who may be sent to any school within the administrative area to fill a temporary vacancy, and who are under the direct control of the central office.
- (2) "Supply" teachers casually employed at the instance of the district correspondent, when unattached teachers are not available, who may send supplies to any school within his jurisdiction to fill occasional vacancies of a temporary character.

The Head Teacher.—*The Head Teacher* is generally teacher, director, and superintendent. His opportunities for good are great and many. His responsibilities are, therefore, commensurate therewith. No one could desire a more responsive field for sowing good seed than that represented, as a rule, by the scholars of a school. The head teacher's influence must depend primarily on his strength of character.

In order that the sum of his influences may be great over both staff and pupils, the following are the chief qualities and powers it is desirable for him to possess : (1) lofty sense of duty ; (2) broad sympathy—not willingly “to brush the down from a butterfly’s wing” ; (3) sound judgment ; (4) power of insight into character ; (5) love of his work ; (6) originality or initiative, and belief in “the continual law of progress” ; (7) self-control ; (8) organising power ; (9) firmness ; (10) persuasive powers of speech ; (11) general purity of character ; and (12) ability to breathe the spirit of it into the school. Of course this array of qualities is somewhat ideal. A detailed knowledge of school work is presumed.

It should be borne in mind that every head teacher worthy of the name is generally regarded by his scholars as an ideal personality possessing extraordinary knowledge, and gifted, too, beyond the run of ordinary mortals. Honour, justice, truth are presumed to govern all his actions. This general and illimitable faith, combined with the reality of his own powers, are forces which he can direct to perfect the organisation and control of his school. The greatest care and circumspection are of course necessary if the scholars’ ideal is to remain unsullied and unshattered amidst the daily provocations to which he is subjected. Self-watchfulness ought to be his constant sentinel.

The principal duties of the head teacher are included in (1) organisation, (2) supervision, (3) teaching, and (4) examination ; or, to use official phraseology, “the general control and supervision of the instruction and discipline.” The special aim of the school, its size, the number and capabilities of the assistant teachers, the character of the building are factors in determining a wise distribution of time over these various parts of a head teacher’s work.

The salient features of organisation are too evident to

be indicated in this connection; but two or three points are worthy of note here. Although the word "standard" has been deleted from the Code so far as it applies to classification, the standards are still retained in name and scope as *standards of examination for certificates of proficiency*. In practice, however, they are still used to define courses of instruction applicable to classes, though there is much evidence of freedom from the trammels they originally imposed. The liberty of unrestricted classification—*unrestricted*, that is, within reasonable limits—has been utilised by the adoption, in suitable cases, of intermediate courses between one standard and another, and by other departures from the old lines, making for greater changes still. But in this respect each school must discover for itself what courses are best suited for its own development, as local circumstances vary so greatly.

Sometimes a classification is adopted based on attainments and aptitudes of scholars in one or more subjects, as distinguished from their general attainments in *all* subjects—this latter being the basis on which classes are usually organised. For example, the school being arranged in classes according to general attainments, a scholar in, say, Standard IV. may possess exceptional talent in drawing, and have but poor ability in *number*. The head teacher can then, if he pleases, allow this scholar to receive instruction in all other subjects in Standard IV. and place him for drawing in Standard VI. and for arithmetic in Standard II. Indeed the whole school may be organised on this plan. Time-table difficulties, however, arise in this connection.

It is generally desirable, for example, to have longer lessons in the upper than in the lower school; but if the above principle were largely or wholly applied, it would be necessary to have most, if not all, lessons commencing

and ending at the same time. In practice, therefore, it is found not to work well, as a rule, in an elementary school, if put extensively into operation. Probably the best application of this principle of *cross classification*—as it may be called—is a limited one founded on the few cases of exceptional ability in a certain direction on the one hand, and one-sided dulness on the other, which are invariably present in every school.

Departmental teaching, referred to elsewhere, founded on the apparently logical basis of subjects rather than classes, is somewhat allied to this system of *cross classification*, inasmuch as both are founded on *subjects*: in the former case the subject is primarily associated with the teacher, and in the latter case with the scholar.

Supervision cannot, of course, be complete, and must indeed be defective, when the head teacher is solely responsible for a class. The degree, therefore, with which this can be carried out must depend on the amount of school freedom he possesses. An able and liberal assistant staff will confer all the liberty he can reasonably desire. It is a mistake, however, to allow even supervision to be too engrossing—to be a gulf swallowing up most of the time—for colleagues should be trusted until they are found wanting, and supervision merely involves a general, and only *occasionally a particular*, watchfulness over the application of syllabuses, methods of instructions, home lessons, discipline, and degree of observance of organised plans generally.

It ought not to be necessary for any head teacher, possessing firmness of decision and ordinary force of character, to repeat his requests twice, before they are accepted and applied by every member of the staff. Besides, excessive supervision is not conducive to that good relationship between head and assistants which ought

to characterise every school. Young and inexperienced assistant masters and mistresses, of course, need more supervision and guidance than others.

And under direction and supervision comes a possible phase of the head teacher's work, which, on account of its limited field, is liable to receive at his hands less attention than it deserves, viz. the training of pupil and student teachers, who are to fall into the professional ranks later, and to take the heavy responsibilities which such action involves. The standard of training and example that is set before them will, if high, live in achievement in future generations, and will bring home to the giver, in its own time, a beautiful satisfaction; but if, on the other hand, it is perfunctory or low, or indifferent, they may fail in their future work, and will certainly enter the battle with a broken lance. Indeed, it may be said that the head teacher's general effectiveness can be accurately measured by the degree of success achieved in the training of would-be and young teachers.

One of the most important functions that a head teacher is called upon to discharge is that which refers to actual teaching. A certain amount of time per week, about ten or twelve hours, ought, as far as possible, regularly to be given to this work. It is inadvisable for the head teacher to confine his attentions in this respect to one or even two classes—assuming that there are many classes—but to distribute his teaching over the whole school from time to time, giving weak spots and the upper classes, particularly the first class, a little more of his individuality and power than the others. The intimate relationship between the head and the scholars established by this direct teaching puts him into more sensitive communication with the pulse of the school. He can better estimate by this means the value of the training which the pupils are receiving,

than by mere examination, which, after all, only brings out the less important side of a good education. These lessons, too, should serve as models in method, breadth of view, and fulness of knowledge for the guidance and example of the assistant staff, apart from their value in extending and colouring the horizon of the scholars.

In Germany, the United States, and Canada it is a general practice for head teachers, even of very large schools, to give about one-third of their time to actual class teaching. "The Rektor (head teacher), apart from his general supervision of the school, performs usually twelve hours' teaching a week. He does not always teach either the same subject or the same class, but varies his work every school semester."¹

School Examinations. — Examination, essential for obtaining exact information as to the progress on some, *but not all*, important points, should be systematised. The usual practice is to divide the year into two or three terms and give an examination towards the close of each, based, of course, on the work prescribed. Occasional tests are also advisable in certain subjects, especially if there is a weak spot in the teaching staff.

The regular term examinations² assume individual form in the three R's, and *class* form, mostly, in the other subjects, except in the upper classes, where it is generally

¹ Report of Mr. G. Andrew to the Scotch Education Department on the Primary Schools of Berlin and Charlottenburg, 1904.

In Kansas City "the head teacher is usually responsible for a class, and thus exercises relatively little supervision over the work of a school."—Report of the Rev. A. W. Jephson, issued by the late School Board for London, 1904.

² These are in accordance with the Revised Instructions of 1903 to H.M. Inspectors. See (d) *Examination of School Work*, Prefatory Memorandum, Code 1904, and also Art. 22.

desirable to have written tests in most, if not in all, subjects. Individual *viva voce* examinations are, too, very valuable, when they can be carried out under proper conditions.

The possibility of holding these examinations is hardly worthy of discussion, provided circumstances are normal. In a liberally staffed school no difficulties need arise; but in schools where the head teacher is responsible for a class, a temporary interchange of classes between the head and the assistant whose class is to be examined has some weak points, though it is generally found to work satisfactorily.

In all these examinations¹ it is most important that the head teacher (1) *should set the tests and questions himself*: in some cases, particularly when the class teacher is a specialist in a certain subject, it is desirable either for the head teacher to consult him before finally deciding on the questions, or to allow *him* to draw up the questions—this is preferable—and for the head to approve their ultimate form; (2) *should be careful that they are reasonable tests*, having regard to the courses prescribed, the period of the year, and the attainments of the scholars at its commencement; (3) *should personally and strictly supervise the examination*; (4) *should as far as possible examine all the papers himself*: this will give him a knowledge of the state of things which he could not otherwise possess; (5) *should allow each scholar to see his paper after correction*, so that errors may be known and right ideas substituted; (6) *should record the degree of proficiency by a mark or symbol, in a schedule or book kept for that purpose*, in the case of all individual tests, and a general assess-

¹ It is extremely important that the courses of instruction in previous years or terms should not be forgotten. If, for example, a child is working in Standard V., some questions should be given bearing on the work already done in the lower standards.

ment and criticism on all subjects; (7) *should see that his standard of desirable attainments is a reasonably high one*—this is, to some extent, governed by (2); and (8) *take immediate steps to remove or remedy any glaring class or individual deficiencies and weaknesses revealed by the examination.*

Above all, the head teacher must bear in mind the peculiar position in which he is placed by these examinations—called upon to judge the work for which he is ultimately responsible and to record the judgment in writing. It is therefore a position of great trust, and one that deserves to be met by corresponding sincerity and candour. The presence therefore in the head teacher's mind of the true spirit of justice and a complete absence of self-interest ought to direct him through every stage of the examination, and companion him in assessing the results and in recording his criticisms, which, needless to say, should be fearless and impersonal. In other words, he ought to weigh the results and test their educational value like a fair-minded expert estimating the work of an unknown person. Ultra sensitiveness of the staff, or any part of it, to adverse criticism of its work should not be considered. There is, however, a gentle and a rough way of telling the truth. The wise head teacher will know which to choose.

A generous or over estimate of the value of the work accomplished will defeat the object which prompted such folly; while any suppression or covering of ugly truths must prove the sowing of "dragon's teeth," the self-gathering harvest of which must inevitably come later. The welfare of the school and the interests of the whole staff are best served in discovering the truth and telling it in a plain way.

Curriculum, Syllabus, and Time Table.—In determining each of these, due consideration should be given to (1) the

Code,¹ the spirit of which will be found to be a valuable guide. Certain subjects named therein are, to all intents and purposes, *obligatory*, though reasonable latitude is allowed to meet exceptional cases. The Herbartian principle² of possible unification of subjects is recognised. Froebel's insistence upon practical work and the need of adjusting instruction to environment also comes in for broad and desirable recognition. (2) The class of children, their sex, ages, and attainments. (3) The quality of the staff. (4) Building and equipment. (5) Times of meeting. (6) Local circumstances generally. In agricultural districts, for example, it is desirable that the elementary principles of agriculture and horticulture should be taught. There is, too, in this instance, a wide field for Nature study. In the French and German country schools these subjects receive generally a conspicuous share of attention.³

But, apart from local circumstances, there are certain subjects whose influence upon the scholars' lives, after the school career has ended, cannot fail to be great and beneficial. Prominently among these stand English literature and Civics, both of which occupy an important place in the curricula of American schools.⁴ A further point to consider is the desirability of making the instruction in all subjects, as far as possible, practical—manual dexterity having an important place. "The School of Education" at Chicago, formerly presided over by Dr. Dewey, is an

¹ See Arts. 1 to 7, Code 1910.

² That subjects of instruction should be, as far as possible, so connected and associated with one another that the child's ideas should be bound together in circles of thought.

³ See Special Reports (Mr. Sadler's), Vols. 7 and 9.

⁴ See Reports of the Mosely Education Commission.

experiment on these lines.¹ The theory of to-day should be translated into practice on the morrow: and if the child can discover the application for himself, so much the better. All the great educational theorists from Bacon to Spencer may be said substantially to have promulgated this view.² The "Real Schools" of Germany are partially founded upon it.

Syllabus.—Immediately the subjects of instruction and their modes of presentation have been generally determined, the syllabus for each branch of the curriculum should be carefully drawn up as an organic whole. That is to say, the organiser must have in view not only one term or one year's course of instruction, but the whole range of work designed for the pupil during his school life. In other words, the syllabus in design should be a static unity; and, in application, a dynamic unity. The subjects should therefore, as far as possible, be correlated with one another, and adjusted to the character of the environment and the general requirements of the scholars. Once framed, the syllabus should not be regarded as necessarily permanent in form, nor need the organiser wait till the close of the year to effect revision³ if that is considered immediately desirable, or imperative. Changes of a minor character may be advisable from time to time, rendered necessary by altered conditions, or judged desirable through a wider experience or the acquisition of some special skill or knowledge. Visits and excursions⁴ allowed by the Code should be projected—they can be modified later if necessary—as soon as a term's course has been definitely settled.

¹ See Report of the Mosely Education Commission, pp. 203 and 356.

² "The school must encourage to the utmost the children's natural activities of hand and eye by suitable forms of practical work and manual instruction."—Introduction to Code 1910.

³ Art. 3 (a).

⁴ Art. 44 (b).

CHAPTER V.

"I rose from my knees. . . . The world reappeared.

"I roused myself, drew aside the silk that covered my eyes, and plunged my bare face into the light."—Kinglake's *Eothen*.

"All the really important things of life must of necessity be self-taught."—*The Disadvantages of Education*, Edward A. Parry.

TIME-TABLES.

WITH SPECIAL REFERENCE TO THE ORDINARY
GRADED SCHOOL.

Ceteris paribus, the easy working of a school will depend a great deal on the suitability of the Time Table, which must always be approved by the local education authority and H.M. Inspector. In the planning of it skill, intimate knowledge, and forethought are necessary if it is to work with the minimum of friction, and thus economise both time and energy. The Time Table is the second school clock, on the face of which are shown at intervals the hour of the day, the kind of lesson in progress in every class, the recreation interval, and the moments for assembly and dismissal. Its motive power is the spirit of the organiser pervading every part of the building, working silently and governing all the material changes that are necessary to a school's daily life.

In framing or planning the Time Table the following additional considerations to those already named in relation to curricula should have their due weight:—

(1) The desirable amount of time to be devoted to each subject in the curriculum.

(2) The desirable length of each lesson, having regard to (a) the comparative importance and difficulty of the

subject, (b) whether the lesson is theoretical or practical, (c) the age and powers of the scholars. This has been already mentioned, but it is so important that attention is called to it again.

(3) The proper distribution of the lessons in relation to (a) morning or afternoon, or early and late parts of these sessions¹; (b) the character of the subject—whether it is chiefly mental or chiefly mechanical in its demands; (c) the staff—the strain on a teacher being great if two or three oral lessons succeed one another; (d) the internal structure of the building. This point becomes accentuated if more than one teacher be working independently in the same room. Quiet lessons should alternate with aggressive or noisy ones in the case of adjoining classes.

Concerning (1) the following represents approximately the distribution of time over the various subjects of instruction²:—

Humanistic Subjects.		Science and Nature Study.		Physical Culture and Manual Training.	
	h. m.		h. m.		h. m.
Bible Instruction	... 3 20	Geography	... 1 0	Physical Exercises and Games	... 1 0
History	... 1 0	Nature Study or Science	1 20	[Recreation Intervals]	2 5
Singing	... 1 0	Mathematics	4 0	Manual Training (Boys) or Domestic Training for Girls	... 2 30
Drawing and Modelling	2 0		6 20		
English	... 8 15				
	<u>15 35</u>				<u>5 35</u>

These make in all $27\frac{1}{3}$ hours.

¹ See Child Study Reports in connection with the Chicago Public Schools.

² See Report of the English Conference, 1909, issued by the L.C.C.

It is considered by some educationists that the "time usually allotted to handicraft and mathematics might, by a closer correlation of geometry with woodwork or metal work, be more economically used,"¹ and thus set free time that could be devoted to English or any other subject.

The time that should be devoted to English has been recently under consideration by a body of experts,¹ and their recommendation is—

Age of Children.	Time per Week.	
	Boys.	Girls.
7-9 years.	10 hours.	11 hours.
9-11 "	10 "	11 "
11-14 "	9 "	10 "

The hours to be divided thus for boys—

	Age 7-9.	Age 9-11.	Age 11-14.
Phonetics 	50 m.	30 m.	—
Reading 	4 h.	3 h.	1 h. 30 m.
Writing (mechanical) ...	1 h. 30 m.	1 h.	30 m.
Spelling and Dictation ...	1 h. 10 m.	1 h.	1 h.
Grammar 	—	30 m.	1 h.
Composition (oral and written)	1 h. 30 m. (mainly oral)	2 h.	2 h.
Literature (incl. Recitation)	1 h.	2 h.	3 h.
	<u>10 h.</u>	<u>10 h.</u>	<u>9 h.</u>

The extra hour for girls is to be "divided between grammar, literature, and the historical study of words."

Of course this additional time suggested for English—eminently desirable as it is, especially the phonetic training—must involve the curtailment of the time devoted to one or more other subjects. Speaking generally, far too much time is devoted to arithmetic in the lower classes; two hours a week for the two lowest classes are ample, and three hours should suffice for the next two grades above. The time thus gained should be devoted to English.

¹ See Report of the English Conference, 1909, issued by the L.C.C.

If a modern language is taken, three hours a week should be devoted to it in the upper school.

With regard to (2), the length of the lessons should vary in the infant school from 15 to 25 minutes, according to the ages of the scholars.

In senior departments a line must be drawn between the upper and lower classes for this purpose. In the lower school lessons should not, as a rule, exceed half-an-hour in duration, except in needlework. In the upper school lessons might reasonably range from 30 to 45 or 50 minutes. Certain exceptions, however, must be made in favour of the following subjects:—

(i) *Physical Exercises*.—Five minutes' smart drill each morning and afternoon during four days of the week, and one lesson of 20 minutes on the remaining day; the instructor to give during the longer lesson special attention to posture, and position of the arms, hands, legs, and head.

(ii) *Needlework*—1 hour.

(iii) Lessons in laboratory or a practical science room—1 hour at least.

(iv) *Handicraft* for boys; cookery, laundry, housewifery for girls—generally 2 hours should be the minimum; but where slum localities exist and the physique and staying power of the lads are considerably below the average, it is desirable to limit the manual training lessons to $1\frac{1}{4}$ or $1\frac{1}{2}$ hours.

(v) *Handwork* generally, e.g. paper-cutting, modelling, etc.

In regard to 3 (a) and (b) it is an accepted view that mental power wanes under the influence of strain or fatigue. The morning therefore is better than the afternoon, and the earlier part of these sessions is better than the later parts, for subjects that especially demand mental vigour. Mechanical subjects such as writing (mechanical),

drawing, etc., are therefore usually taught in the afternoon "Extreme fatigue lowers the *memory power*."¹ Points (c) and (d) have been previously considered.

The curriculum, syllabus, and time-table having been respectively settled and arranged on a fitting basis, teachers should remember that the mere letter of these will breed dead monotony, but that the spirit will confer life. They should further bear in mind, with regard to the scholars, this imperative dictum, "With all thy getting, get understanding." Professor Armstrong in an address before the British Association at Belfast in 1902 said substantially the same thing: "We recognise the 3 R's in primary education, but there is need for 4 R's, the fourth being the development of reasoning power in the scholar."²

The time-tables submitted below, mostly as abstracts, are in actual use in schools of high repute. Notes are made in connection with these tables if they are considered capable of improvement, having regard to local conditions. With slight modifications to meet local circumstances, they should serve the purpose of any ordinary elementary school. With the aid of the points recommended for the guidance of those planning time-tables, the abstracts should enable anyone to draw up a satisfactory working arrangement.

The following extract from the Elementary Education Act 1870 [section 7 (2)] should be carefully noted:—

"The time or times during which any religious observance is practised, or instruction in religious subjects is given at any meeting of the school, shall be either at the

¹ See Child Study Reports in connection with the Chicago Public Schools.

² See Preface to the Mosely Education Commission Reports, 1904.

beginning or at the end, or at the beginning and the end, of such meeting, and shall be inserted in a time-table to be approved by the Education Department [now Board of Education] and *to be kept permanently and conspicuously affixed in every schoolroom: and any scholar may be withdrawn from such observance or instruction without forfeiting any of the other benefits of the school.*"

Further, in determining what shall be the curriculum and time-table, the quantity of work to be accomplished should only be considered in relation to its quality. In other words, the organiser should ask himself not how much the scholars can store in their memories, but how much they can really assimilate and transform into living power. "The creation of a right taste; occupation of the hands and minds of children in useful ways which stimulate to industry or to directions which appeal to their love of beauty or of use; the development of the sense of wonder at, and sympathy with, nature,—a first ingredient of worship; the encouragement of reverence for the beautiful, the good, the true,—a natural basis for religion; these are some of the ends which are kept in view when choice has to be made of subjects to companion the three R's in the school courses."¹

And again, in regard to limitations of the curriculum: "You might read all the books in the British Museum . . . and remain an utterly illiterate, uneducated person: but if you read ten pages of a good book, letter by letter, that is to say with real accuracy, you are for ever more, in some measure, an educated person. The entire difference between education and non-education (as regards the merely intellectual part of it) consists in this accuracy."²

¹ Mr. H. T. Mark on "Moral Education in American Schools,"—Special Reports, Vol. 10.

² Ruskin, *Sesame and Lilies*.

TIME-TABLE OF INFANT SCHOOL.

Time in Minutes for each Subject per Week.

SUBJECT.	TIME IN EACH GRADE.					
	A. St. I.	B. St. I.	Gr. III.	Gr. II.	Gr. I.	Gr. I.
	Min.	Min.	Min.	Min.	Min.	Min.
English—						
Composition (W.)	40	45	70	105	70	60
" (oral)	125	145	140	165	145	125
Reading ...	65	65	40	45	45	45
Word Building	30	40	50	20	25	15
Recitation ...	15	15	25	100	100	90
Stories ...	100	105	110	—	—	—
Writing ...	140	125	—	—	—	—
Number ...	70	70	95	105	120	120
Drawing ...	60	60	125	125	125	125
Object Lessons ...	100	100	100	100	80	60
Nature Study ...	100	75	100	75	100	100
Physical Exercises	140	140	165	180	215	275
Kindergarten and	20	20	—	—	—	—
Brushwork ...	20	20	—	—	—	—
Geography ...	75	75	80	80	75	85
History (Stories) ...	125	125	125	125	125	125
Singing ...	125	125	150	150	150	150
Scripture ...	150	150	—	—	—	—
Recreation ...	—	—	—	—	—	—
Registration, etc. ...	1500	1500	1500	1500	1500	1500
Total ...	1500	1500	1500	1500	1500	1500

N.B. —There are no formal lessons in Number below St. I. Number is dealt with incidentally, however, mainly through the agency of games.
 Physical Exercises take the form mostly of games.
 Actual registration does not occupy 150 minutes per week, though so expressed on the time-table.

ANALYSIS OF TIME-TABLE (INFANT SCHOOL).

	Trans. 1.	Trans. 2.	Trans. 3.	Gr. III. a	Gr. III. b	Gr. II. a	Gr. II. b	Gr. I. a
<i>English, including</i>								
(1) Reading and Preparation (Language) ...	3.50	4.0	3.0	3.45	3.45	2.30	2.30	2.30
(2) Recitation ...	45	55	60	40	55	55	45	1.15
(3) Stories ...	35	40	50	50	55	50	50	1.15
(4) Oral comp. ...	See Language Less.—Stories and Convers. Less.							
<i>Number</i> ...	2.15	1.55	2.30	2.30	2.15	2.15	1.15	—
<i>Mental</i> ...	45	1.0	—	—	—	—	—	—
<i>Writing, including</i>								
Printing and Drawing in Lower Grades	3.0	2.45	2.45	2.30	2.45	2.0	1.35	—
Preparation for Dictation ...	45	1.0	—	—	—	—	—	—
<i>Conversational Lessons</i> ...	1.0	1.0	1.0	1.10	1.10	1.10	1.0	2.55
<i>Physical Exercises and Games</i> ...	1.40	1.50	2.30	1.55	2.15	2.5	1.45	3.20
<i>Singing</i> ...	1.40	1.50	2.10	2.5	2.15	2.10	3.10	2.55
<i>Educ. Handwork, inc. Drawing</i>	2.40	2.35	1.40	2.5	1.25	3.40	3.40	3.45
<i>Scripture, including Prayers</i> ...	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
<i>Recreation</i> ...	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.45
<i>Registration</i> ...	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40

NOTE.—The three Transition Classes correspond roughly with Sts. I. a, I. b, I. c.

General Notes concerning all Infant Time Tables set out here:—

Reading below Grade III. is not formal reading, but language lessons and preparation for reading by blackboard and other demonstrations.

Writing. Similarly *writing* is not formal but freearm drawing of letters, etc.—and trays, etc.

Number. Chiefly taught incidentally in the lowest classes.

ANALYSIS OF TIME-TABLE (INFANT SCHOOL).

Time in Minutes for each Subject per Week.

SUBJECT.	TIME IN EACH GRADE.							
	St. I. a	St. I. b	St. I. c	III. a	III. b	III. c	II. a	II. b
English—								
{ Composition (W.)	—	—	—	—	—	—	—	—
{ " (oral)	65	55	55	—	—	—	—	—
Literature ...	65	50	75	45	50	70	70	—
Reading and Lan- guage ...	185	225	200	125	125	150	150	—
Word Building and Sound Drill ...	50	50	70	50	50	50	50	125
Recitation (see also Literature) ...	—	30	10	25	20	—	—	45
Stories ...	40	20	20	60	65	75	90	105
Writing and Printing	115	95	105	125	120	115	110	50
Number and Number								
Games ...	135	125	125	125	125	125	125	125
Drawing ...	95	105	80	100	110	110	100	90
{ Object Lessons ...	25	25	—	—	—	25	20	See Chats.
{ Nature Study ...	50	50	75	75	100	75	50	20
Physical Exercises ...	85	85	85	90	80	80	80	80
Kindergarten ...	100	105	120	120	95	115	125	220
Optional Lesson ...	—	—	—	—	20	—	—	20
Geography ...	20	20	—	—	20	—	—	—
Chats ...	—	—	—	45	45	45	40	40
Acting (see also Sing- ing, Games) ...	15	—	15	25	20	15	15	20
Marching in Hall ...	25	25	25	25	25	25	25	—
Singing ...	65	80	75	70	75	70	90	100
Scripture ...	175	175	175	175	175	175	175	175
Recreation ...	125	125	125	125	125	125	125	175
Registration, etc. ...	65	55	65	95	55	55	60	110

- NOTES.—(1) 8.50 to 9.5 a.m. Monitors at work—care of class-rooms, plants, etc.
 (2) 9.5 to 9.15 a.m. Upper classes in Hall (Mondays excepted).
 (3) When lessons are not followed by games or recreation, five minutes' interval is given for (a) a run or skip out of class-room, or (b) game in class-room, or (c) free chat, etc.
 (4) 11.10 or 11.30 children in the two lowest classes go into playground for 5 or 10 minutes.
 (5) Time-table for Grade I. not shown here. It varies according to circumstances.

ANALYSIS OF TIME-TABLE (GIRLS' SCHOOL).

Time in Minutes in each Class.

SUBJECT	St. I.	St. II.	St. III.	St. IV.	St. V.	St. VI.	Sts. VII. and Ex. VII.
	10th Form.	8th and 9th Forms.	6th and 7th Forms.	4th and 5th Forms.	3rd Form.	2nd Form.	1st Form.
English—							
(a) Comp. (W.)	60	60	60	50	60	60	60
(b) „ (Oral)	50	50	50	50	50	30	30
(c) Dictation ...	30	60	60	30	—	—	—
(d) Grammar...	30	30	30	60	90	110	110
(e) Literature	—	—	—	30	30	30	30
(f) Reading ...	210	210	210	150	150	90	90
(g) Recitation	60	60	60	60	60	60	60
(h) Word Buil.	70	70	40	20	20	—	—
(i) Writing ...	60	30	30	30	30	30	30
Arithmetic ...	110	110	110	110	110	130	130
„ Mental	60	60	60	60	60	60	60
Drawing ...	120	120	120	120	120	120	120
Geography ...	90	90	90	120	120	120	120
History...	60	60	90	90	90	90	90
Observation and Nature Study.	90	90	90	90	—	—	—
Organised Games and Physical Exercises	70	70	70	70	60	60	60
Singing...	60	60	60	60	60	60	60
Scripture ...	200	200	200	200	200	200	200
Recreation ...	100	100	100	100	100	100	100
Algebra...	—	—	—	—	—	60	60
Hygiene ...	—	—	—	—	90	90	90
Needlework ...	120	120	120	150	150	150	150
Total ...	H. M. 27 30	H. M. 27 30	H. M. 27 30	H. M. 27 30	H. M. 27 30	H. M. 27 30	H. M. 27 30

NOTE.—Specialisation in Singing.

Cookery and Laundry taught at Centres.

Physical Exercises include Dancing and Skipping.

	Class	9.0-9.10	2.50-3.0	3.0-3.15	3.15-3.35	3.35-3.55	3.55-4.0
M	St. I. & Gr. III. Gr. I. & II.	Assembly, Registration, and Prayers	Recitat'n	Recreation	Singing	Kinder- garten	Prayers and Dismissal
			Story		Kindergar.	Optional	
T	St. I. & Gr. III. Gr. I. & II.		Singing		Object Lesson	Paper Cutting	
			Optional		Recitation and Singing	Kinder- garten	
W	St. I. & Gr. III. Gr. I. & II.		Optional or Recit.		Games	Recitat'n	
			Story		Kindergar.	Optional	
T	St. I. & Gr. III. Gr. I. & II.		Singing		Kindergar.	Kinder- garten	
			Reading		Drawing	Games	
F	St. I. & Gr. III. Gr. I. & II.		Recitat'n		Kindergar.	Optional	
			Singing		Kindergar.	Optional	

Total Minutes
1500
1500

	Needlework	Optional	Total Minutes
80	180	—	1650
	180	30	1650
	180	30	1650

SUMMARY OF TIME-TABLE (GIRLS' SCHOOL).

Subject	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
English—									
(a) Composition (Written)...	30	30	35	35	40	40	40	40	40
(b) Composition (Oral)...	30	30	35	35	40	40	40	40	40
(c) Dictation ...	30	30	35	35	30	35	25	20	20
(d) Grammar ...	—	15	20	20	20	20	20	20	20
(e) Reading Lessons ...	4:20	4:10	4	3:20	3:25	3:10	3:20	3:5	3:5
(f) Silent Reading ...	—	—	—	35	40	4	—	—	—
(g) Literature	1:15	1:20	1:20	1:40	1:35	1:35	1:35	1:25	1:35
(h) Word Building ...	1	50	50	30	30	20	20	20	20
(i) Writing ...	1:25	1:5	1:5	35	30	30	30	20	30
(j) Writing ...	3:5	3:20	3:40	2:40	3:20	3:30	3:30	3:20	3:20
Arithmetic	3:5	40	40	40	40	40	40	40	40
"Mental"	1	1	1	1	1	1	1	1	1
Drawing	45	1	1:5	1:5	1:5	1:5	1:5	1:10	1:10
Geography ...	45	1	1:10	1:10	1:10	1:10	1:10	1:10	1:5
History ...	—	—	—	—	—	—	—	—	—
Object Lessons, Science and Nature Study	1	1	1:10	1	1:10	1:10	1:5	1:15	1:5
Physical Exercises	1	1	1	1	1	1	1	1	1
Singing ...	1:10	1	1	1:5	1:10	1:10	1:10	1	1:5
Scripture ...	2:30	2:30	2:30	2:30	2:30	2:30	2:30	2:30	2:30
Needlework ...	2:40	2:40	2:40	2:40	2:40	2:40	2:40	2:40	2:40
Office Work	—	—	—	—	—	—	—	—	—
Map Drawing and Sketches	—	—	—	—	—	—	—	—	—
Open Time ...	25	25	25	25	—	—	—	—	20
Libraries given out	—	—	—	—	15	15	15	15	—
Registration, Written Spelling,*	—	—	—	—	—	—	—	—	—
Prayers, Dismissal ...	1:15	1:15	1:15	1:15	1:15	1:15	1:15	1:15	1:15

+ 50 minutes weekly for Writing and Spelling (every morning* 8:55-9:5) while Registers are being marked).

* Children in every class have written Spelling Exercises every morning from 8:55 to 9:5.

NOTE.—Grade 1 corresponds to Standard I, Grade 9 to Standard VII. Physical Exercises include Dancing and Skipping.

TIME-TABLE (BOYS' SCHOOL)—IN A VERY POOR DISTRICT.

	Grade I.	Grade II.	Grade III.	Grade IV.	Grade V.	Grade VI.	Grade VII.	Grade VIII.	Grade IX.	Grade X.
* English	13	12 $\frac{1}{4}$	10 $\frac{1}{2}$	10	9	9	9 $\frac{1}{4}$	9 $\frac{1}{4}$	9 $\frac{1}{4}$	9 $\frac{1}{4}$
Arithmetic	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{3}{4}$	3 $\frac{3}{4}$	4	4	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
History	1	1	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Nature Study	1	1	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Geography	1	1	1	1	1	1	1	1	1	1
Drawing	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$
Singing	1	1	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Drill	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	1	1	1	1	1	1
Organised Games	1	1	1	1	1	1	—	—	—	—
Play	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
Scripture	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
Prayers and Dismissal	1	1	1	1	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Totals	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$	27 $\frac{1}{2}$

* English includes Reading, Recitation, Composition, Writing, Spelling. Grammar taught incidentally.
Specialised Subjects—Singing, Drawing, History, Nature Study. Grade I. = Standard I. approximately.

Day	Class	2.40	3.10	3.20	3.55	4.30
Mon.	1	Ex. 20 m.		Grammar	Reading	
	2	Dr'wng.		Reading	Writing	
	3	Singing				
	4	Reading		Ph. Ex. 20 m. + Sing. 20 m. + Wg. 30 m.		
	5	Writing		Rd. 30 m. + Ph. Ex. 20 m. + Sng. 20 m.		
Tues.	1	Reading		Composition Oral	Written Compn.	
	2	"		History	Composition	
	3	"		Composition	Writing	
	4	"		Recitation	"	
	5	"				
Wed.	1	Reading	Recreation	Composition	Dictation	
	2	"		"	Grammar	
	3	"		"	Drawing	
	4	Writing		Reading	Grammar	
	5	"		Ph. Ex. 20 m. + Sng. 20 m. + Rd. 30 m.		
Thur.	1	Singing		History	Drawing	
	2	Ex. 20 m.		Reading	Writing	
	3	Dwg. 45 m.		Ph. Ex. 20 m. + Sing. 20 m. + Rtn. 30 m.		
	4	Singing		Rd. 30 m. + Ph. Ex. 20 m. + Sg. 20 m.		
	5					
Fri.	1	Composition		§ Silent Reading		
	2	"		Reading	Transcription	
	3	"		"	"	
	4	"		"	"	
	5	"		"	"	

Prayers and Dismissal

§ (Cookery and Laundry): Tuesday, 2-4.30 p.m.
 † Place to Geography and Composition.

Classes	Composition (W.)
1	100
2	100
3	65
4	—
5	—

Omitting overlapping subjects—Manual Training, Cookery, and Laundry.

TIME-TABLE OF A SENIOR MIXED DEPARTMENT OF TEN CLASSES.

Time in Minutes for each Subject per Week.

SUBJECT.	TIME IN EACH STANDARD.							
	3 & 4 B.	3 & 4 G.	5 B.	7 G.	6 B.	6 G.	7 B.	7 G.
English—								
Composition (W.)	70	70	115	115	115	115	90	90
" (Oral)								
Dictation ...	75	35	30	30				
Grammar ...	80	80	85	85	70	70	100	100
Reading ...	145	105	150	110	125	85	150	130
Recitation ...	70	70	80	80	80	80	80	80
Spelling ...	40	40	—	—	—	—	—	—
Writing ...	30	30	30	30	30	30	30	30
Arithmetic ...	180	180	210	210	210	210	210	210
" (Mental)	40	40	40	40	40	40	40	40
Drawing ...	120	120	120	120	120	120	120	120
Geography ...	120	80	70	70	80	80	80	80
History ...	110	110	80	80	110	110	90	90
Object Lessons ...	30	30	40	40	—	40	—	—
Organised Games	—	—	—	—	—	—	—	—
Physical Exercises	70	70	60	60	60	60	60	60
Singing ...	75	75	95	95	95	95	95	95
Scripture ...	150	150	150	150	150	150	150	150
Recreation ...	125	125	125	125	125	125	125	125
Registration, etc.	50	50	50	50	50	50	50	50
Needlework ...	—	160	—	160	—	160	—	160
Map Drawing ...	40	—	40	—	40	—	40	—
Recent Events ...	30	30	—	—	30	30	—	—
Elem. Science ...	—	—	40	—	40	—	40	—
Algebra ...	—	—	40	—	80	—	100	—
TOTAL ...	1650	1650	1650	1650	1650	1650	1650	1650

Standard 3 boys have reading in place of map-drawing.

Manual Training ...	St. 7. Mon. A.M.	Laundry....	St. 7. Mon. A.M.
" 6. Wed. A.M. and P.M. ;		" 6. Mon. P.M.	
Thurs. A.M.		" 5. Fri. P.M.	
" 5 and 6. Wed. A.M. ;		Swimming...	Boys. Tues. 9-10.
Thurs. A.M.		Girls. Fri. 2-3.15.	
Cookery	St. 7. Mon. A.M. ; St. 6. Mon. P.M. ; St. 5. Fri. P.M.		

TIME-TABLE OF A BERLIN SCHOOL OF EIGHT CLASSES.

SUBJECT.	a HOURS FOR EACH CLASS PER WEEK.							
	(Lowest.)				(Highest.)			
	VIII.	VII.	VI.	V.	IV.	III.	II.	I.
Religion ...	3	3	3	4	4	6	4	4
German ...	8	7	7	6	6	4	6	6
Observation...	2	2	2	—	—	—	—	—
History ...	—	—	—	2	2	2	2	3 (2)
Arithmetic ...	4	4	4	4	4	4	4 (2)	4 (2)
Geometry ...	—	—	—	—	—	3	3 (2)	3 (2)
Nature Knowledge..	—	—	—	2	2	4	4 (3)	3
Geography ...	—	—	—	2	2	2	2	2
Drawing ...	—	1	2 (1)	2	2	2	2	2
Writing ...	—	2	2	2	2	1	1	1
Singing ...	1	1	2	2	2	2	2	2
Gymnastics ...	2	2	2 (1)	2	2	2	2	2
Sewing ...	—	—	(2)	(2)	(2)	(3)	(4)	(4)
Total ...	20	22	24	28	28	32	32	32

N.B.—The numbers within brackets refer to Girls.
 Note especially the blank spaces in the first three columns to the left.

Annual Conferences,¹ as well as occasional ones to meet special cases, between the head teachers of the departments of a school are desirable with a view of (1) co-ordinating the methods of instruction in such subjects as arithmetic, drawing, writing, nature study; (2) arranging the time for the recreation interval of each department so as to cause the minimum amount of inconvenience to the other departments; (3) having a common policy in the endeavour to bring the home and the school into harmony; (4) making provision for the interchange of visits between the assistant teachers of the infant and senior departments during school hours; and (5) settling, as far as practicable, all inter-departmental relations.

All these matters may need careful readjustment from time to time.

The co-ordination of methods in certain subjects is extremely important. If this is not done the progress of the scholars will be generally retarded, and some of the energies of the teachers wasted in every part of the school. The methods therefore ought to be arranged by general consent, and those adopted for subjects common to departments carried out in all loyalty. Writing especially often suffers through the want of a general agreement on main principles. In arithmetic, again, it is not uncommon to find divergent ideas prevailing in different places as to the way in which it should be taught.

The kind of co-ordination suggested here covers mostly fundamental principles; method, in its full sense, is usually charged with personality, which must generally be allowed, within limits, to have a wide range of play.

As the views and influence of the assistant staff count in these matters, the interchange of visits has been suggested—but not entirely on this ground. Generally speaking,

¹ Enforced in L.C.C. schools—Art. 64 L.C.C. S.M. Code.

there is no bond of sympathy existing between the teachers of infant and senior departments. Indeed it is not unusual to find some teachers openly expressing their disapproval of infant methods and infant ways and means generally, and occasionally there is the suggestion of a want of proper preparation for the senior departments.

This, it is submitted, results from a wrong conception of the functions of an infant school on the part of those not immediately connected with it. In the same manner, infant teachers perhaps do not always appreciate the difficulties of other departments—difficulties especially felt in the lowest grades or classes. Hence the desirability for mutual understanding and intimate individual co-operation. If an infants' teacher is allowed to spend an occasional hour in watching the methods and work of the senior departments and *vice versa*, it is claimed that a better correlation of work would result, that many existing difficulties would silently disappear, and that a clearer vision as to the functions and relations of all departments would come to every member of the staff.¹

The annual conference should be held two or three months before the close of each educational year, and a permanent record of the minutes kept: indeed this preservation of the minutes should apply to *all* school conferences.

¹ See pp. 2 and 135, Mosely Education Committee Reports 1904, for similar arrangements.

CHAPTER VI.

"Self-reverence, self-knowledge, self-control,
These three alone lead life to sovereign power."—TENNYSON.

"Self-government is the object a great school proposes to itself
in its life and laws."—TUNING, *Education and School*.

DISCIPLINE.¹

DISCIPLINE is the regulation of conduct by the operation of will-power in the individual. The will must be trained, directed into right channels; and this training can only be effective when applied to daily activities and the interests associated with them. The will cannot, in other words, be trained by mere abstractions. Fine thoughts and feelings are poor stuff unless translated into worthy actions. An individual is not what he thinks and feels, but what he does. Conduct is the test of the value of life. Character results from the link between mental states and actions; and this link should be voluntarily forged by the individual himself.

Will represents a relation between ideas and the mind associated with them. An idea is always the starting-point of will-power, and therefore the precursor of action. A condition precedent to the full exercise of discipline is good feeling and a mental equipment in which some at least of the ideals that have tended to uplift the race and mankind at large have found a place.

¹ See Welton and Blandford's *Moral Training through School Discipline* for a lucid and comprehensive treatment of this subject.

Discipline expresses itself externally in conduct. Conduct, however, may be determined by rules, regulations, and commands, disobedience to which may involve pains or penalties—this is regulation of conduct by government, when personal liberty would lead the scholar in another direction. So far therefore as conduct is determined by government, and without the pleasurable exercise of the will by the individual, it is not the result of discipline properly understood. Where, however, the rules and regulations are willingly accepted by the school community for guidance, there is coincidence of will between the ruler and the governed, and then the government may be said to be merged in discipline. When this merging is complete, the ideal has been reached so far as discipline and government are concerned.

It must be understood, however, that discipline covers a wider field than government; that while the latter may be merged in the former, discipline will still have an independent realm of its own; otherwise what is known as distinctive personality would cease to exist in school life. Correspondence between them can never be complete. Discipline is internal: government is external. The springs of the one are within the individual: those of the other are without.

Environment plays a most important disciplinary part in education. The standard value of the educative process is the perfect adjustment of the individual to his surroundings. The discipline of environment lies in the limitations imposed on needs and activities, and in the consciousness of the influence of these limitations. So far as environment influences involuntary behaviour, it is not educative; but when action is controlled or has a consciousness of purpose behind it, the disciplinary or educative effect is present.

The ultimate aim of discipline, and of teaching generally, is mainly moral—preparation for life—for the highest destiny of which an individual is capable; but the immediate aim associated with the graded steps in the educative process is not necessarily moral—indeed it mostly has no direct connection with morality; but every step in the acquisition of knowledge implies discipline, and this is essential to the building up of character. These steps are the training ground from which the developed personality should emerge, relatively strong in those qualities which the wise educator desires to forge: and among those qualities are skill to perform as well as will-power to direct.

Every detail in school work should co-ordinate with the organisation in order to realise the school's aim, in which discipline must play the all-important part. Every minute is a factor in the process of the formation of mental attitudes and habits from which character is finally forged, and upon which an intelligent activity is founded.

The exact adjustment of government to the needs of all scholars—if this ever takes place—when perfect training is necessarily based on individual differentiation—can only be regarded as a miracle of achievement: and this adjustment sometimes approximates to exactitude, since discipline in the educator's mind, when other conditions are satisfied, works so largely by faith.

The two chief powers that help to train and mould character are therefore government and environment—the latter partakes of the nature of government, and is here used in its broadest sense. These two combined should give the law of life. They are the urging finger-posts that lead the way to self-direction and self-control.

Discipline then is of two kinds: (1) external discipline, (2) internal or self-discipline. The education is practically perfect when the first is transmuted into the second.

The "law for man is in the first place an external law, but it may become an internal law. When man has once recognised the inner law and bowed before it, through this reverence and voluntary submission, he is ripe for liberty."¹

The end of discipline then is individual self-government, and its outward expression is conduct. School government, on the other hand, is shown in general orderliness and in the ways and means by which the school as a whole is rendered efficient. Harmonious development of each scholar should be its aim. It should teach the child what to love and reverence, and see that this love and reverence take dynamic form. As all educative power is discipline, so discipline in its broadest sense should be the whole life of the school, the rest being merely accessories.

As the laws of a nation, combined with the public conscience, give the standard of public morality, so do the laws of a school, added to the influence of its chief, give the standard of school discipline. If the government is sound, the tone is certain to be sound also.

Tone is both the voluntary and involuntary manifestations of the moral attributes of a school.

Good tone therefore implies sound discipline, which from the class point of view has been already discussed, and the main principles in relation thereto indicated. These principles have a general application. Some points, however, remain to be stated in connection with the school department.

There are, of course, certain fundamental principles which the good disciplinarian always accepts for his guidance in whatever class or school he may be placed. There are, however, auxiliary aids which have to be enlisted according to the ages, attainments, and sex of the scholars.

¹ *The Simple Life*, C. Wagner,

There arises also in relation to these the question as to the degree of application of some of these fundamental principles.

It is evident that the discipline which often characterises a good boys' department would not be, as a whole, equally suitable for a girls' school. Again, the discipline that might be admirably adapted to a girl's department would be altogether out of place in a school for infants. Similar differentiation is often necessary in the treatment of children in the various classes of a department. The kind of discipline that is suitable for infants between three and four years of age is not equally applicable to children between six and seven. Indeed it may be said that as a child ascends through the three grades of an infant school, discipline, in its proper sense, should correspondingly rise in its demands upon him.

These remarks apply with almost equal force, but with some variations, to the classes in the senior departments. The children of the lower classes must be made to feel the irresistible power of external forces, whether they are natural or conventional. The iron hand, however, ought to be covered with the velvet glove. But the upper classes, and particularly the first class, do not, as a rule, need exactly the same disciplinary treatment. The scholars there have already passed through the earlier stages of a firm disciplinary régime, and have, in all probability, been guided thereby and shaped their habits accordingly. They are drawing nigh to the threshold of the labour world, and each must soon play his part without a mentor by his side. It is desirable therefore that the older pupils especially should learn to govern themselves collectively and individually whilst kindly corrective powers are at hand, of which, as far as possible, they should be unconscious. In other words, the ideal is that government should

ultimately be absorbed in self-government. In perfect discipline there is unconsciousness of the existence of law; for law ceases to exist when full obedience is rendered to it.

Of course, self-government should be inculcated in every stage of school life, but its indispensable nature must be insisted upon within reasonable limits in application to the older scholars.

Before quitting the essentially spiritual side of this subject as distinguished from that which deals with mere routine, it is desirable to state what those fundamental principles are upon which every kind of good departmental discipline must rest. These must appeal successfully to the child's whole nature, without losing sight of his life as an organic unity, and to his responsibility as a member of the school community. It may be laid down therefore

(1) *That the premises and routine of the school must be such as to ensure to each scholar reasonable bodily and mental comfort and adequate physical exercise.* Good ventilation, plenty of sunlight, suitable desks, and change of work and position are therefore necessary. Hygienic conditions are essential.

(2) *That natural and moral beauty should be loved and moral depravity condemned.* Opportunities of exciting pleasurable emotions by the contemplation of moral attributes or the sight of natural beauty ought therefore to be seized whenever possible. Of course, it is equally important that vicious qualities should excite emotions of pain. But this will be next to useless unless mental states and actions are connected. The dynamic principle of education should be always applied whenever possible. Training consists mainly in the formation of good

habitudes and habits, and the will must be braced for this purpose in every phase of school work. "Character is higher than intellect. A great soul will be strong to live, as well as to think."¹

- (3) *That the intellectual and imaginative faculties be trained.* Imaginative power appears to wane after a child has passed its sixth year. This is probably because little or no pains are taken to cultivate this power, that helps to colour life as the sun colours the flowers. Imagination makes friends with nearly everything in the world. Napoleon used to say, "You can only govern men by imagination: without imagination they are brutes. 'Tis by speaking to the soul you electrify them."
- (4) *That the law of the school must be based on moral law and a knowledge of child life.* The ultimate sanctions of moral law are to be found in natural law. It should give rewards for obedience and industry and punishment for neglect. Purposive obedience is the root of the higher life.
- (5) *That while discipline is directed to the training of the scholars as a whole, it should be regulated as far as possible to meet each child's special needs.* A word of kind reproof will work wonders with one pupil, while to another severe rebuke or even stronger measures must be applied. The best training does not consist in the suppression, but in the fullest expression, of personality.
- (6) *That the teachers should be in sympathy with child nature and respect its natural tendencies and reasonable desires.* "Sympathy is our best friend in education."² It helps the teacher to get into

¹ Emerson.² Miss Edgeworth.

real contact with the whole spiritual being of the child.

- (7) *That there should be unity of purpose and a co-ordination of interests.* Group-consciousness, duty, rights and obligations, and other factors implied in a commonwealth of units should be realised.
- (8) *That the interests be many-sided and have corresponding intensive activities.* Those who know how to use time to the best advantage, or even to use it well, have received a sound training. Close application usually implies fidelity in little things, and this is the root of all great achievement.

"The entire object of true education is to make people not merely do the right things, but enjoy the right things; not merely industrious, but to love industry; not merely learned, but to love knowledge; not merely pure, but to love purity; not merely just, but to hunger and thirst after justice."¹

Esprit de corps is the child of good discipline. It is the beneficent spirit that animates the school as a whole. It symbolises the scholars' devotion to the school's fundamental laws, to its interests, and to its honour.

Of all the many ramifications associated with school organisation, few are more important than the work of routine and enlisted aids that have for their object the formation of good habits and the general furtherance of the high aim which discipline has in view. Brief notice of these, under various heads, is desirable.

Attendance.—The value of punctual and regular attendance to a school, a class, and the individual scholar is manifest. A high level of efficiency, uninterrupted progress

¹ Ruskin.

in the courses of instruction, and habits of systematic and punctual attention to duty can only be secured when the attendance is quite satisfactory.

The minimum of absence should be covered by actual necessity and those calls from daily routine generally recognised by the community. It must be borne in mind, however, that this minimum is a variable quantity. The age and sex of the pupils, the district, the season, and also the weather when abnormal, are operative in determining what this minimum shall be.

Although in educational administration the teacher is not held directly responsible for regular attendance, yet it may be generally said that when the sum of the school influences is good, the regularity of the scholars fairly corresponds with it. It is, moreover, always considered creditable to a department when the percentage of attendance is high, notwithstanding the responsibility of the bye-law officers in these matters. But the punctual side of attendance is one, perhaps, that lies more immediately within the range of the teacher's office. If there is any weakness in this respect, it is generally found that the regularity suffers also.

The want of punctuality is sometimes due to wilful dilatoriness: but there are certain children whose development is arrested, and who have little or no "time sense." It is important that the teacher should distinguish between these and endeavour to apply remedial measures in each case.

The organiser therefore ought to leave no stone unturned in the endeavour to obtain that high degree of punctuality which may lie within the possibilities of the locality in which the school is situated. Punctual and regular attendance ought to be coveted for its own sake as a duty, apart from the immediate or ultimate advantages in the way of

school efficiency. It is, however, a mistake to raise it almost to the position of a divinity. The "perfect week" is an ideal institution, its perfection consisting in the punctual attendance, each session, of every scholar on the roll during a given week. In other words, the "perfect week" represents the percentage of attendance as 100.

Such weeks in a large school only come by miracle, or by overstraining the motives for good attendance and giving them a glamour which is not naturally their own. It is conceivable that children, acting under the zealous and magnetic influence of a strong head teacher, may be led to attend school under circumstances that make it desirable they should remain at home, both in the interest of their own health and that of the scholars with whom they are brought into contact. The "perfect week" is excellent as an aim, provided the pupils are safeguarded by advisory precautions. It is, of course, easier to get a week's perfection of attendance in a small school than in a large one, since the adverse possibilities are reduced.

Rewards.—The term *rewards* ranges in meaning from words of commendation to valuable prizes of permanent form. In the United States prizes in the school sense are extremely rare, whereas in this country their usefulness is recognised in most schools.

It is a fairly common practice to give cards and prizes for punctual and regular attendance, provided that conduct is quite satisfactory; but each school when under isolated management, and each educational area, has had its own system.

Cards, however, are usually awarded for punctual and regular attendance either weekly or quarterly or both. Prizes, mostly in the form of books, are awarded annually on the basis of the year's attendances, a very small margin

of absences being generally allowed, to meet either exceptional or well-recognised demands. In some districts the local authority, limiting and varying the amount per head to be expended on each standard or class according as it is the lowest or highest, has allowed the head teacher of each department to draw up his or her own scheme for awarding prizes, on the basis of attendance, conduct, and progress. Such schemes, however, should be approved by the local managers or the local education authority.

In order further to accentuate the value of exemplary attendance, some authorities award medals to those scholars who have attended punctually on every occasion on which the school has been open during the educational year, provided the absences do not amount to more than the equivalent of two whole days. It should be noted that these medals have, as a rule, little or no intrinsic value. They mostly consist of either white metal or bronze. A silver medal is sometimes awarded for a phenomenal achievement in the way of attendance, covering a period of about ten years.

Badges.—Some head teachers, acting on their own initiative, have instituted badges to be worn by scholars whose exemplary conduct has been considered worthy of a distinguishing mark. The badge, however, does not become the personal property of the scholar, like the prizes and medals, but is liable to be taken away should there be any lapse from that standard of good behaviour which merited distinction.

In the hands of a wise head teacher, this system might work well: but it is necessary to guard against the growth of priggishness which such a method of distinction is not unlikely to foster.

If the badge is conferred with the approval of the class

teacher—as it should be—the distinctive mark should then carry with it the right-at-will of monitorship. The office would then probably absorb the “Jack Horner” consciousness of virtue which the badge alone, without the office, would tend to create and keep alive.

The monitorship only refers to work in connection with the routine of the class-room and the playground, and not in any sense to teaching.

Banners, Flags, School Ladder, etc.—It has been found a useful stimulus to the class to give into its weekly keeping a banner or flag for meritorious conduct and the best attendance during any particular week. This induces a friendly rivalry between class and class which reacts on the individual scholar who is disposed to be absent occasionally and unnecessarily from school. Another good plan, tending in the same beneficial direction, is represented by the “school ladder,” which, hung in a conspicuous position, indicates, during any one week, the relative positions of merit, in regard to attendance, of each class in the school.

Again, the *Friday half-hour* has proved of value as an incentive to excellent class attendance, the last half-hour of the final session of the week being devoted to play in the case of the class or classes that have reached a certain high percentage of attendance. The privilege of being dismissed before other schoolfellows apparently has its charms. Care must be taken, in connection with this practice, that the necessary two hours' secular instruction is given in senior departments. It may become necessary on this account to reduce the “half-hour” to 15 or 20 minutes; but even then experience shows that the charm remains unbroken.

On abstract grounds, this practice is hardly commendable, notwithstanding its success. As, however—con-

sidering the short time involved—the privilege is more technical than real, one is not disposed to cavil at it; but it really belongs to the class of *immunities* in favour of which little can be said. All immunities carry the implied official sanction that temporary exemption from school duties is a desirable thing; whereas the teaching in a good school should inculcate the contrary, and the training should point emphatically in the same direction as the teaching. Life has, however, many strange contradictions, and possibly the school also must have its miniature foibles.

Monday morning and Friday afternoon are, as a rule, the worst sessions of the week for attendance. Why is this? There must be a psychological cause. The phenomenon is so constant that it may almost be regarded as a law. A special appeal to scholars or parents will improve the attendance on these occasions: but the law constantly asserts its claim to respect and secures it in the end. A deviation might arise under temporary pressure, but as soon as that pressure is removed, reversion or retroversion is inevitable.

“Monday’s cardinal and reprehensible error” consists in “beginning the business week.” “Monday brings a feeling of revolt.” “Friday allows itself to be a little flurried and excited—to some extent, throws in its lot with Saturday.”¹

If this view is correct, as appears likely, though it is expressed without any reference to school life, the reasons for departure from the normal seem to be inherent in our social and religious institutions. However, the phenomenon, or law, implies some laxity, the result of undesirable mental attitudes, which in the interests of the children immediately concerned and the general efficiency of the school should be changed for better states of mind.

¹ Essay on *The Town Week*, E. V. Lucas.

Some special attractions should be associated with the school work on Monday mornings and Friday afternoons—a means to the desired end that has been successfully adopted in not a few schools. On Monday morning, for example, when the building lends itself to full assembly, the head teacher addresses the whole school, reviewing the past week's work, driving home important points connected therewith, and calls attention to any public events of interest—using all as a moral lever to uplift the school and to send it on its week's way with a strong living impetus charged with lofty endeavour and the force of conviction. These occasions are also used to inspire the assembled scholars with the ideals of life and the need for the acceptance of them as guides if complete manhood or womanhood is to be attained.

These addresses should, of course, be always thoughtfully prepared. They should represent at least one occasion in a week in which the head teacher, touching the highest plane of life attainable by him, reaches out to, and gets into real spiritual contact with, every scholar, and also with every member of the staff. Occasionally an able assistant teacher might be entrusted with an address of this kind. Change is stimulating, and different modes of presentation have their educational values.

With regard to Friday afternoons, myths, legends, fairy tales told by the teacher—these never lose their charm at any stage of life—lantern lessons, readings from favourite books, dramatisation of historical events or of literary incident (possibly aided by paper costumes and cardboard weapons) have been found attractive. It is not unusual to have on the time-table an "optional lesson" on Monday morning and Friday afternoon. The teacher is thus free to select whatever attractive subject he considers the most effective to meet a particular occasion.

Ethics of Rewards.—Is it advisable to give rewards or prizes either for good attendance or progress? Although *conduct* and *progress* are generally combined with attendance for this purpose, the rewards in practice really rest almost exclusively on attendance in elementary schools: that presupposes to some extent the other two. The motive for such prizes does not reach the great majority of the scholars, and probably nearly all those who secure prizes would attend just as well and work as zealously without having the prospect of rewards in view. But the worst feature of the case is that attendance prizes tend to weaken rather than strengthen the obligation to be industrious and regular at school.

The community imposes the obligation of attendance: industry is implied by this imposition, for the one would be almost worthless without the other. Scholars should be led to realise at the earliest moment that this double obligation is imposed primarily in their own interests. As children delight in little acts of service to their elders, they should know that the country will expect service in some form from them later, and that this service cannot be efficiently rendered unless they are educated. A really strong motive for attendance and industry is thus forged, which, fostered by parents and school, can rarely fail to be effective. An appreciation of prospective personal importance under reasonable conditions is usually an incentive to activity.

To offer prizes for doing what the community commands is to weaken the sense of obligation imposed and to starve the growth of the idea of duty, which demands the expression of the fullest power in every person. Obedience is the first duty of childhood.

Although the prospective service to the state is remote, the child has a present grasp of the meaning of the word; and moreover the *certainty* of service in the future is

assured under normal educational conditions and by the prospect of life. But with prizes, the case is vastly different. In the first place, a child cannot realise what a prize in its full sense means until he has received one; secondly, there is no *certainty* that he will obtain a prize even if he struggles to secure it—indeed, the chances are generally strongly against success; and thirdly, there is not only the remoteness of possibility, but also the remoteness of time.

It usually happens therefore that prizes for achievement appeal more strongly to the older than to the younger scholars, and far more forcibly to those whose natural ability and power of application give reasonable assurance of success than to the ordinary pupils of a school, who constitute the great majority. Indeed, it may be said that under the usual conditions of award, the prize system, applied to achievement, does not appeal to the ordinary scholar at all. The reason for the stronger appeal to the older scholars lies in their acquired power to generalise experience—to organise their experience into concepts.

This ability implies a degree of concentration which enables ends to be kept in view remote from the present and consequently further removed from the primitive impulse of instinct. With young children instinct is dominant: it teaches them to look to the present rather than to the future, and hence for them even the prospect of a prize induces no lasting and reliable stimulus. It is for this reason that weekly cards for attendance and conduct are much more effective than terminal or yearly awards—the ends, not being remote, become constantly operative.

Prizes possibly tend, it is said, to foster a desire for material gain rather than a sense of duty, and to stir up feelings of pride, envy, malice, and other uncharitable sentiments

altogether opposed to the true corporate spirit of a school. This conflict of feeling, however, only applies to the few who run a close race without the sporting spirit. But there does not appear to be much force in either of these two contentions. The adverse influence is often unduly magnified by writers on these points. Every device to stimulate activity has its positive and negative sides. Like all other generally recognised school devices the prize system, it is believed, can be rendered innocuous by wise application, which would, of course, include adjustments to meet every possible situation. Generally, however, attendance prizes should not be awarded. Obviously, good attendance and industry have their own rewards: they imply progress; and every child delights in the consciousness of power conferred by added physical or mental strength.

If, however, prizes are awarded in a school, they ought to be either few in number and relatively difficult of attainment, sustained effort being indispensable, and confined to particular studies that need special encouragement; or they should be awarded to all who, to the satisfaction of the teacher, have shown consistent application, struggled to master difficulties, and generally made sound progress. Indeed, if the principle of awarding prizes is recognised, both these plans might be put into operation in the same school: but the less material value a prize has the better, provided it is otherwise good, unless the prize in question is made subservient to immediate or projected studies. In some schools prizes are given for (1) good conduct and (2) proportionate success in studies. Sometimes each class is annually allowed, with proper safeguards, to select by ballot one or more of its members who have distinguished themselves by good qualities throughout the year. *Proportionate* success does not

necessarily enable the cleverest children to carry off the prizes, but renders it possible for the dullest scholar, by supreme effort to master difficulties, to receive due recognition in this respect, the teacher of course being the sole judge. The test in this case would naturally be the sum total of the records for a term or year, and not a final examination—making proper adjustments for age, application, and degree of ability.

There is so much diversity of view concerning the question of rewards that it appears almost hopeless to arrive at any purely academic agreement. The psychology of the question has not yet been thoroughly established: but strangely enough, the basis of application of the prize system is fairly general, and this is especially so in secondary schools. There are some who think prizes should be given for character and not for achievement; others would reverse this order and make conduct a qualifying condition. On the other hand, some educationists would award prizes for voluntary home-work only; while a few others refuse to accept such external incentives to exertion and consider that the *good will* is the most effective and only true instrument.

The true value of a prize is measured by the extent and intensity of the effort to secure it. It is the honour associated with the possession of a prize and not its monetary value that constitutes the real motive for great and prolonged exertion, and when that prolonged struggle is ended and the consciousness of achievement and of a stronger and a fuller life is made manifest, the true and best reward is revealed. This motive power could be made to have a wider application if prizes were mostly awarded on a "handicap" basis, instead of allowing natural talent to get all, or nearly all, the spoils of victory.

(It is thought that certificates artistically designed, suit-

ably worded, and worthy of permanent preservation would serve all the laudable purposes which now underlie the award of prizes. Certificates, of course, would have to be graded, those of the highest type being few and very difficult of attainment. They might be classified into (1) certificates of honour, (2) certificates of merit, and (3) certificates of proficiency.

The timely and judicious use of praise in the ordinary course of school work will, however, often effect more good than the remoter prizes and certificates. Scholarships are awards of a rather different type to those which have been considered. No one will be disposed to find fault with the principle of giving clever and industrious children an opportunity of obtaining the fullest educational benefits that the country's institutions afford.)

Punishments.—The true art of discipline lies in the complete government of children without their consciousness of restraint. The controlling power of the teacher falls away, therefore, from this ideal in so far as resort to punishment becomes necessary. Hence every task imposed, every censure administered, and every measure of restraint applied implies some defect in the machinery of government, or possibly some weakness in the personality of the staff—each is a confession of failure to influence a pupil by the best and most lasting means. All punishment is in itself an evil; but out of evil good often comes.

The necessity, however, for some form of restraint or chastisement to meet exceptional cases is wisely and generally recognised. Punishment is the lesser evil applied to avoid the greater one that lives in the future. A closer study of the individual characters of children would often obviate the necessity for punishment. The ordinary

child is charged with potential activities; his delight is to give expression to them. Instinct ultimately resolves itself into movement. Good discipline should keep all active tendencies adequately and educationally employed. Variations in disposition account for the different potentialities shown by children and their tendency to run in certain directions.

It is these variations, in connection with large classes, that make a teacher's work so difficult. Under such circumstances it becomes a practical impossibility adequately and always to allow for the personal equation in directing the activities in question; and therefore unless the self-control of the child is great, or implicit obedience has become a habit, there must necessarily be some individual breach of order or instructions. Such breach is a child's safety-valve for the time being. The child, however, must be made, for its own sake, to render obedience, to cultivate will power, and thus keep its activities under proper control. (Self-restraint can only come from experience and training.

If the tone of the school is sound and the class teacher has the respect of his scholars, it often happens that the most effective punishment is the reproof of the teacher coupled with the disapproval of the conduct of the offender by the other members of the class. But much depends on the way in which the reproof is administered. It is not so much what is said—though that of course is important—but the manner in which the words are spoken that strikes home, leaves the lasting impression and gives the energising power that leads to amendment—for the ultimate object of punishment is repentance.

(Not a few teachers insist on a rigid kind of class government—no doubt with the best intentions—with the view probably of avoiding or reducing the possibilities of

offence; the result is that the scholars tend to become automata. This is not discipline; it is rather the negation of it. A certain amount of liberty—as much as is consistent with the accomplishment of sound work—should be granted to each pupil; otherwise there can be no choice of action and consequently no training of the will. Liberty is the salt of the school: and it must be given even if breach or non-observance of rules is practically certain to follow. Indeed, it will be found that the rigid disciplinarian not only subjects himself to a constant and needless strain, but finds it necessary to punish more often than his colleague who takes a saner view of the teacher's functions. "A mild and liberal rule so ameliorates the tone of feeling as to diminish the tendency to transgression.¹ An excellent rule for the teacher is *pas trop gouverner*.)

The sanctions of punishment are to be found in—

- (1) *The right of every corporate body or school community to compel its members to observe the laws framed for their common welfare.*
- (2) *The implied trust inherent in a school community to safeguard and promote the best interests of each of its subordinate members. This includes measures to insure repentance in wrong-doers.*
- (3) *Legal sanctions.*
- (4) *Natural and moral sanctions.*)

The offences that justify penalties of some kind are either *moral* or *disciplinary*. Disciplinary faults include breaches of the school rules.

Punishment has a two-fold function—*reformation* on the one hand, and *prevention* on the other.

In some American schools trial by jury for moral

¹ *Education*, H. Spencer.

delinquency has been introduced, the teacher acting as judge. The Principal of Theyer Street School, Providence, says:¹ "I have made each schoolroom a separate unit of organisation, on the basis of continual self-government, with reference not only to the larger matters, but to all the details of discipline. The pupils in each room choose each month, by ballot, a committee on self-government, consisting of five members. It is the special duty of this committee to take notice of any offences against good order and propriety.)

("At some proper time, usually at the close of the school, the chairman of the committee presides over the class and presents the charges against offenders. The pupil charged is allowed to say what he chooses in defence or explanation, and the pupils decide by vote what the punishment shall be. The teacher is an *ex-officio* member of the committee, and places in the hands of the committee any complaints which she may have to make against any pupils. She reserves a power of veto which she exercises in case the judgment of the pupils at any time seems to be improper."

This plan, the principal states, has been attended with the happiest results. "The attitude of the school, as a whole, exhibits a marked change. In most of the rooms the notion that the teacher is to watch the children to prevent disorder and idleness has passed away. There is quite as good order when the teacher is absent from the room as when she is present. This plan has seemed to be especially successful in developing a feeling of *social responsibility*."

This Theyer Street scheme of government is a modification of the "school city" plan as carried out in some New York schools.

¹ Vol. 10, p. 135, Special Reports.

Forms of Punishment.—Punishments usually assume the form of (1) caution or censure, (2) deprivations, (3) impositions, (4) suspension, (5) corporal punishment, and (6) expulsion.

Censure.—It has been already implied, if not directly stated, that punishment ought to be used sparingly. Continual fault-finding does harm. Bona-fide attempts to eradicate a bad habit by substituting a good one, or to overcome a difficulty, are materially aided by a kind word at every successful or half-successful step; while upbraidings for clumsiness or lack of wit, etc., have quite the opposite tendency. Some inexperienced teachers are prone, on the commission of an offence or blunder, to hurl a battalion of unkind words at the scholar, recalling past offences and faults. Such action is mischievous. On the other hand, the love of approbation in children is strong; advantage should be taken of this on every proper occasion.

Reproach for past offences is poison in a child's veins; whereas apt praise will sometimes raise a giant beanstalk in a night.) The Bourbons "learnt nothing and *forgot* nothing." The world knows their fate; and failure can be foreshadowed for every one who does likewise, in all walks of life.

{ Private censure is often the best. It is not good, however, to be absolute on any of these questions, unless fundamental principles are involved; for so much depends on the nature of the fault, the character and disposition of the offender, the surrounding circumstances, and also the personality of the teacher—each one a factor in determining the desirable line of action,—that the teacher, having himself an intimate knowledge of all concerned, is most likely to prove the best judge of the course to

pursue in a given set of circumstances. Counsels of perfection are not always the best in application, especially when made to suit abstract situations. The class teacher therefore should use his own good judgment in these cases, after reviewing all circumstances and being assured that he has grasped the material facts. It would probably be advisable to consult the head of the school when the circumstances are somewhat unusual. If, however, the offence is a moral one, committed openly in class, then it is probably best to denounce the offence, and censure the offender, openly also. But whatever is done, observance of the principle applicable to all punishment is desirable, viz. the censure should not go beyond the minimum necessary to secure the object in view. Excess kills the purpose of censure, and weak denunciation minimises the nature of the offence in the minds of the children.)

Deprivations.—Deprivations include (1) loss of marks, (2) loss of place. It is assumed that every school has its system of good conduct marks. It is needless to say that misbehaviour ought not, under any circumstances, to affect the marks given in the ordinary subjects of instruction. Assuming that right influences are at work at home, and that the parents are periodically communicated with concerning a child's progress, the loss of marks for indifferent conduct *qua* conduct ought to be an effective weapon.

Loss of place may follow from loss of marks for poor conduct, and assume several forms, *e.g.* (1) temporary disgrace—a scholar is removed from his usual place in class for some minor but persistent fault—such removal not lasting for longer than one or two sessions.) (2) Loss of play at the recreation interval. (3) Deprivation of the right to play for the school in a sports match. (4) De-

tention after school hours. (5) Loss of certificate or prize wholly or partially dependent on good conduct. (6) Deprivation of office, *e.g.* removal from the position of prefect or monitor. (Of these (2) is the least satisfactory. This should never be put into operation against a class as a whole, for reasons too obvious to mention, quite apart from the demands of ventilation.)

Detention after school hours should not be allowed to exceed half-an-hour, with or without impositions. It is usual to have a rota of teachers for this purpose, for without close supervision detention is next to useless. (This is a fairly good remedy for careless work or persistent inattention. Any imposition insisted upon during this time ought as far as possible to have reference to the loss occasioned by the offence for which detention is enforced. Generally speaking, however, enforced inactivity is a great punishment; but it can hardly be justified if extended to half-an-hour, if it can be justified at all.)

Impositions.—It is well to avoid the meaningless pernicious drudgery that consists in writing a word or phrase a hundred or more times, and also the task of committing to memory some portion of the Bible. (It is not good to associate the Bible with restraint and compulsion.) If *writing* is imposed, it is best to associate it with an element of interest or profit, and not lifeless routine, so that the maximum good may result.)

Corporal Punishment and its Ethics.—Corporal punishment, next to expulsion, should be the *dernier ressort*. Many educationists consider this kind of punishment is more efficacious if administered in private, and after the lapse of an hour or thereabouts from the time the offence was committed. Circumstances, however,

sometimes arise when it is deemed desirable to administer such punishment before the class or even the whole school, especially if the offence is a grave one against the school community. It is manifestly improper for a teacher to inflict corporal punishment when harbouring feelings of resentment against the offender. Such feelings might amount only to righteous indignation; but the danger of excess is always present in the absence of calm dispassionate judgment. On the other hand, Mr. Bernard Shaw says: "If you strike a child, take care that you strike it in anger. . . . (A blow in cold blood neither can nor should be forgiven.)" Possibly the best comment on this extraordinary view is—"probably everything which Mr. Shaw has *not* said is true." However, much of the value of punishment is also lost if administered while the offender is not in a normal condition of mind, that is, in a state of anger or great excitement. Of course, every delinquent ought to have a reasonable opportunity of defence.

In all schools in which corporal punishment is regarded as necessary—and it is so regarded in most schools, French institutions being a conspicuous exception—care should be taken to see that the same standard is maintained throughout the school, that the offender should understand that the punishment is a regrettable necessity, and that mercy is always allowed to season justice.

Herbert Spencer advocates punishment in his doctrine of "Natural Consequences." As want of obedience to natural law inevitably brings punishment, so a breach of rules framed for a child's benefit ought to bring corresponding pain and penalties—they are a foretaste of the reality of things when laws are violated.

Spencer argues that as self-preservation is the first law of life, actions that are injurious to the organism tend not

to be repeated, while those that are beneficial call for repetition. Conduct that results in benefit to the organism is *good*, and conduct that results in injury is *bad*; and hence the "ultimate standards" for behaviour are to be found in the happiness or misery that follows it. Whether bodily conduct is therefore *right* or *wrong* must depend on the resulting reactions—whether they are beneficial or detrimental.

All transgressions of the law of life bring their penalties—the "unavoidable consequences"—and these are not artificial and unnecessary inflictions of pain, but "beneficial checks to action at variance with bodily welfare." The penalties or "painful reactions are proportionate to the transgressions"; they are "natural, constant, direct, unhesitating, and not to be escaped. No threats; but a silent rigorous performance." They further generate "right conceptions of cause and effect"; they represent the operations of an "impersonal agency" and the "discipline of pure justice": they are, too, the "true restraints" and the "most efficient" remedies.

"No humanely-devised penalty can replace" these natural reactions; for "artificial punishments have failed to produce reformation." The highest disciplinary effects have only been attained by those who "approximate their régime to the methods of nature."

In the operation of natural laws lies the "guiding principle of moral education."

Spencer maintains, therefore, that artificial penalties should not be substituted for natural reactions; but there is no reason why artificial penalties should not *accompany* natural penalties. A *secondary* kind of punishment, however, should not usurp the place of the *primary*.

The word "natural" in this doctrine is used in more than one sense—as relating to (1) inanimate nature, (2)

the living organism, and (3) what is acceptable by human wisdom as desirable or necessary, *e.g.* a child plays with hot cinders and burns its fingers; the burning is a "natural consequence."

Another child scatters the contents of a box of toys on the floor and refuses to pick them up and replace them. The next time the child asks for the box the request should be declined. This refusal is a "natural consequence" also.

He pleads for an intimate connection between the penalty and the offence: the former should be the "true consequence" of the latter. In "The Vision of Dante" the same idea is worked out. Similarly Bentham laid down the same principle in application to the Criminal law.

It is generally agreed that there are many weak spots in Spencer's argument. So far, however, as *immediate consequences* are concerned, there is no doubt that *they* direct or control the initial stages in the process of the evolution of the will: and this is Spencer's fundamental point. To sum up, he advocates a close parallelism between punishments inflicted by human agency and those penalties or natural reactions exacted by nature's laws.

(Both Arnold and Thring thought corporal punishment absolutely necessary. Thring, however, opposed its use for *moral offences* on the ground that "protracted feeling, instead of sharpness, is wanted in dealing with a sin."¹) He considered the rod should be confined to disciplinary and wilful offences, other than purely moral ones.

But the oldest and wisest authority on this subject is Solomon, and his view is still honoured by fairly general observance. There are, however, many girls' schools of the highest efficiency in which corporal punishment is

¹ *Education and School.*

unknown; but these schools are dominated by a powerful and charming personality. Corporal punishment might perhaps reach its vanishing point, even for boys, when *all* teachers are strong and magnetic, and able by a sort of ethical induction to neutralise opposing forces and inspire the scholars with their own ideals of life and its duties.

In every breach of law many factors are involved. These should, as far as possible, be determined before punishment is administered. It is not impossible that the teacher may sometimes be the chief factor and primary cause. Dull method, the absence of careful supervision, laxity of aim—these and others are contributory to breaches of regulations. It is not difficult to resolve a few concrete cases into their constituent factors—of course they will vary in each instance, probably in quantity and quality,—and it will be found by this analysis what a surprising number of elements there are, and what subtle variations are sometimes present.

The abstract right to inflict corporal punishment is a great force in itself. Its strength lies chiefly in its silent reservation and suggestiveness. As a static power it is frequently greater than when dynamic, and probably is always so if associated with a strong personality. Indeed, the oftener the right is set in motion, the less effective it becomes. When unexercised or unseen in action, it looms large in a child's imagination and becomes a more coercive and mysterious power than it actually is. For this reason, privacy of punishment, as well as the sparing use of it, appear most desirable. The sympathy, too, of class-fellows is less likely to be excited in the delinquent's favour when penalties are exacted *in camera*.

On the other hand, it is claimed by the opponents of corporal punishment that it represents *brute force*

enthroned, and that in its absence the teacher has the wholesome discipline of both governing himself and keeping the scholars always fully interested and suitably employed. They think the teacher should learn "to walk without a stick."

It is well perhaps to state *seriatim* most of the objections to corporal punishment—urged by those who oppose its use:—

- ✕ (1) It is degrading to the child, and it brutalises the person who punishes.
- (2) It is arbitrary.
- (3) It is unnatural.
- (4) There is an absence of a proper standard for applying the punishment.
- (5) It appeals only to brute instincts.
- (6) It places the child in opposition to authority.
- (7) It creates ill-feeling between child and teacher.
- (8) It is cowardly.
- (9) It is ineffective.

All these, except perhaps (1) and (8), are supported either directly or by implication by Spencer's "discipline of natural consequences."

✕ The opponents of corporal punishment fail to realise the actual conditions of school life and the nature of childhood. The school must be allowed, without unnecessary interruption, to pursue the aim of its existence. The machinery of government is devised to secure this end. Anything that interferes with this arrangement must be brought into line or cast aside. Society is protected against the lawless individual by a graded system of penalties, and why not the school, which is a preparation for society? The penalties of the school are the "milk of human kindness" compared with those imposed by society. The school, too,

is in a tutelary position in regard to each of its scholars. If a child will not conform to law as a child, it is less likely to do so as a man or woman. The iron *régime* must therefore be brought into play to compel obedience, for the child's own sake, apart from the interests of the other members of the school community—or *his last state will be worse than the first*. "He who has not been chastened is not educated."

X Nature's penalties are often remote. The child must be trained and cannot wait for their operation. Immediate penalties, wisely applied, are often immediate remedies. The child is not naturally a moral being: far from it. Primitive man dominates him. He is by no means *sensitive* to moral distinctions or moral influence. As mature intellectual power comes later in life, so it is with moral power: it is a question of gradual development. Those who think corporal punishment degrading, etc., consider the child more angelic than wild, and they further ignore the great variations arising from the personality of the teacher. Their premises are wrong; they see a little of the truth and regard it as the whole truth. The fallacies underlying most of the objections, especially excepting (4) set out above, cannot fail to be discovered by the thoughtful student.

Bell thought that deprivation was the best kind of punishment, while Lancaster pinned his faith to ridicule.

In most educational areas rules have been formulated by the local authority for the guidance of teachers. In some districts corporal punishment may only be administered for grave moral offences, and not even then till other methods have been tried and failed. The head teacher is usually held responsible for all punishments of whatever kind; but he may in some areas, with the consent of the local authority, delegate the power to inflict punishment to

those assistants whom he may consider worthy of the trust.

X There is a fairly general agreement as to the conditions and principles to be observed in connection with corporal punishment. They are: (1) It should be regarded as "beneficent checks to actions" at variance with the welfare of the child and the school. (2) It should be confined to moral offences, and certain disciplinary faults that cannot otherwise be effectively treated. (3) It should be adjusted to the character of the offence and the disposition of the offender. (4) There should be a clear idea as to the cause of punishment, both in the mind of the child and the teacher; and the justice of it should, as far as possible, be recognised by each. (5) It should be chiefly confined to scholars during the *formative period* of their characters—say between six and twelve years of age. (6) The instrument of punishment should be supple, and light in weight. (7) Neither party should be in anger. (8) No prolonged period should intervene between the time of offence and the punishment. (9) It should never be used as an incentive. (10) It should not, except under extremely exceptional circumstances, be administered to highly emotional and delicate children. (11) It should not be applied to any part of the body readily susceptible to injury—and of course it should never be applied to the head. And the writer, siding with the minority, would like to add:—(12) It should, as a rule, be administered in private and in the presence of another adult.

The Law of Corporal Punishment.—As the teacher should be an exemplary citizen and not break the law, it is well briefly to notice the legal aspect of this question.

By the common law of England, any kind of what is known as unlawful restraint or punishment applied to a

child by a teacher is actionable, and renders the teacher liable to fine or imprisonment. Justification can, however, be successfully pleaded when, in the words of Lord Chief Justice Cockburn, the punishment is "moderate and reasonable." Judgment in the following cases briefly summarises the law on this point.

In *Regina v. Hopley* the Lord Chief Justice Cockburn, in giving judgment, said:—

"By the law of England, the parent or the schoolmaster, who for this purpose represents the parent, and has the parental authority delegated to him, may, for the purpose of correcting what is evil in the child, inflict moderate and reasonable corporal punishment, always however with this condition, that it is moderate and reasonable. If it be administered for the gratification of passion or rage, or if it be protracted beyond the child's power of endurance, or with an instrument unfitted for the purpose and calculated to produce danger to life or limb, in all such cases the punishment is excessive and violent, and is unlawful."

In *Gardner v. Bygrave* Mr. Justice Mathew said, in giving judgment:—

"The point for the court was whether, according to the law of England, it was criminal for a master to cane a pupil by striking him on the hand. The magistrate stated that the boy deserved the punishment, and he did not attack the right to punish corporally with the view to intellectual stimulation, as the counsel for the respondent had done. It was clear that no injury was caused in that case, and the punishment was properly inflicted. The reason given by the magistrate, 'that caning on the hand, however inflicted, was necessarily attended by serious injury,' was not sufficient to justify this conviction. It must, therefore, be quashed."

It was held, too, in *Cleary v. Booth* —

"That besides the reasonable authority of a parent or guardian which is delegated to the schoolmaster, the schoolmaster had also the power to inflict corporal punishment upon a pupil for misconduct on the way to and from the school, and out of school hours."

Expulsion.—Expulsion is fraught with such serious consequences that it should only be resorted to when the school's resources have been taxed to the utmost and have failed, and when the continued presence of the offender in the school is likely to be a serious menace to its discipline. It is well for the teacher not to accept sole responsibility for expulsion, but to enlist the aid and authority of the managers. The Board of Education has taken up a definite position on this question, and will support the managers' action if "reasonable ground" can be adduced for exclusion. In this connection the "parable of the lost sheep" should be kept in mind.

The Punishment Book.—The punishment book is a necessary official adjunct to corporal punishment.¹ This book should contain the following items in connection with each case—date, name of scholar, offence, instrument of punishment, mode and amount of punishment, and signature or initials of the teacher responsible.

Parents' and Managerial Aid.—It is hardly possible to over-estimate the value of a strong sympathetic link between the home and the school. The home sentiment is one of the most sacred things in life—it may be said to stand next to that of religion. Sometimes, however, the influences of the home are not favourable to training. The child's affections are nevertheless centred there. It is most unwise for the teacher to speak disparagingly of the home in any case, since that course is likely to alienate whatever sympathies the child has with school life. To oppose silently vicious home tendencies, by endeavouring to form in the scholars good habitudes and habits that will

¹ Schedule IV., Code 1910—"All cases of corporal punishment must be recorded in a Punishment Book."

possibly negate those tendencies, is the best policy. The wise teacher usually finds the means of ingratiating himself into the hearts of the parents, well knowing that even a small place there will help him in the work of training.

Visits to the parents are recommended whenever practicable. The personal touch will often clear away difficulties and create a cordial relationship, in which the possibilities of future misunderstandings will be lost. The parents, too, should be encouraged to visit the teacher at school when any doubt arises in their minds as to the treatment their children are receiving or the progress they are making. Courteous and considerate attention to complaints and requests, even when not made in the best possible manner, is the wisest course always. One disaffected parent, with a reasonable ground of complaint, can do much mischief, while every good and thoughtful parent, who has not been estranged, can serve the school in at least two efficient ways. In the first place, each well home-trained child is a valuable school asset that is not without its reactions on the school community; and secondly, the parent gladly proclaims the beneficent work of the school in the locality, upholds its authority, and thereby reacts on parents less worthy. The school and homes are units in an association having a common interest and, to a great extent, a common aim. The unexpressed desire characterises both—that the children may learn to “do justly, love mercy, and walk humbly” through life.

In many schools the influence for good which the Committee of Managers would be glad to exercise is not adequately utilised. Without suggesting anything in the form of interference with the internal management of the school, it is submitted that the managers' willingness and ability to help might be usefully directed. The teacher

cannot afford to disregard any local force that will aid him in the consummation of his work. Cases of difficulty with parents, as well as with children, might well invoke the individual or collective help of the managers. A visit to the house, or a letter from the chairman, has often been found the turning-point in a new and worthy career for a child, or a fresh and agreeable departure from old ways on the part of the parent. The managers have proved especially helpful in some poor districts by adopting a system of home visitation as school circumstances invited. This is usually done by the ladies. All school functions such as annual excursions, prize distributions, open sessions, book clubs, juvenile friendly societies, and organisations for underfed children are other favourable opportunities for managers to be brought into contact with parents and children.

Other Aids to Discipline.—Other aids to discipline are (1) annual excursions, (2) reports to parents, (3) annual prize-distribution meetings, (4) open sessions, (5) savings bank, (6) home lessons, (7) the school library, (8) leagues of mercy, of courtesy, (9) school clubs, (10) underfed children organisation, (11) school lists, (12) office routine, (13) the hall address, (14) the honour and merit award, (15) the school motto, (16) the school cap and badge, (17) public examinations, (18) the school journey, (19) fire drill, (20) May Queen festival for girls, (21) Fairy Queen and Maypole fête for infants, (22) the old scholars' club, (23) the school journal, (24) the tooth-brush club, (25) the annual flower show, (26) visits of nurses, (27) medical inspection, (28) the "school city" method of government.

Some of these helps call for brief explanation or expansion. All teachers are acquainted with the pleasurable anticipation that belongs to a child months before the

annual Sunday School treat takes place, and the almost delirious joy that is his when the happy day has arrived. A similar annual outing is a desirable institution for every day school; indeed, the practice in this direction is growing. All agencies for good become the more effective by being closely associated with happy hours in the lives of children. Association between parents and teachers on occasions like these strengthens the link that cannot afterwards be easily strained or broken.

Reports to Parents.—Periodical reports to parents should be regarded as a duty. They have the right to know, from time to time, how far the school is carrying out its trust, and what progress their children are making. And this information should have the stamp of authority, and be exact, sincere, unbiassed. (A child, too, has a natural desire to please its parents: it is the more likely, therefore, knowing these reports to be inevitable, to put forth consistent and strenuous effort at school, and to endeavour to secure the approbation of the teacher by good conduct and general progress.) It is best to avoid long intervals between reports of this kind. Half-yearly or term reports are, however, usual. Generalised monthly reports to supplement these would be valuable for junior scholars.¹ The enormous amount of clerical work involved is, however, regarded as a serious objection; but labour that will help to give grit to the rising generation should not be withheld or grudgingly given. The points to accentuate in these communications are conduct, general progress, and attendance. The form on p. 288 is a suitable one when a third column is added for remarks in connection with each subject. Columns (1) and (2) might then, at the option of the teacher, be dispensed with.

¹ See pp. 260-269, "Rewards."

REPORT TO PARENTS.¹

SCHOLAR'S ATTENDANCE, CONDUCT, AND PROGRESS.

For the _____ ending _____ 19__

Name _____ Standard or Class _____

No. of Scholars in Class _____ Place in Class _____

Number of Times the School was open _____

Times absent _____ Times late _____

Scale of Marks :—Excellent ; Very Good ; Fair ; Bad.

	1	2		1	2	Additional Subjects:	1	2
Scripture ...			English ...					
Reading ...			History ...					
Writing ...			Geography					
Arithmetic			Needlework					
Spelling ...			Homework					
Drawing ...			Manual					
Composition			Training					
			Conduct ...					

General remarks :—

_____ Head Teacher.

_____ Class Teacher.

Columns 1. Maximum number of marks obtainable.

,, 2. Marks obtained in each subject.

Open Sessions.—Open sessions, once a year, have been found useful. During these sessions—two, as a rule, are ample—the ordinary school work proceeds as usual, and the parents are invited to visit the school and see its work.

¹ The Report Form should be headed by the name of the School.

ing arrangements. It is a general practice on these occasions to exhibit some of the work that has been done during the preceding twelve months. The open session is one of pleasure to the parents and of delight to the children.

Home Lessons.—Home lessons, given with discrimination, are valuable adjuncts to school work. They represent more than anything else the projection of the school into the home. They help to show parents the reality of the progress the children are making; they become, under proper limitations, a unifying power in the association to which reference has already been made. Home lessons, further, render material assistance in the direction of private effort, without which self-reliance and resourcefulness are an impossibility.

It is well to remember that, under normal conditions, a reasonable day's work for a child has been done at the close of the afternoon session. In order to prevent overstrain, therefore, the home lessons ought to be able to be mastered in time varying from twenty minutes to an hour, according to the age and attainments of the scholar. The work given should chiefly lie within the circle of the year's course of instruction, and should refer generally to the application of what has been already taught. What is demanded should, of course, be reasonably within the range of each child's powers, and be of such a nature generally as to compel the scholar to rely entirely upon himself for its just accomplishment.

The encouragement of home or other effort external to the school, in the direction of interests outside the scope of the school curriculum, is also desirable. Teachers can do much to direct and economise activities on these lines. Language or history appeals strongly to one child, drawing

or handicraft to another, natural history to a third, and so on. Each bias in action helps to widen the range of thought and endeavour that must favourably react on the school community. The main thing is that encouragement should not be sporadic, and that it should find its chief expression in a system of appreciative tests and rewards for work thus voluntarily accomplished. And in connection with this it should be said that no school, while giving whole-hearted support to games, should fail to give to the child some little insight into the right use of leisure. Steadfast work gives an added zest to play.

The kind of work that might well be done is reading, memorising passages from English literature, drawing, handicraft work—well, one might almost say, any subject that excites interest in the *individual*. Preparation of a scene or play for a coming school or class-room performance will sometimes move a whole class to voluntary home activity. It is generally undesirable to be exacting as to time for the performance of work of this character. It is not one effort that is needed, but a series of efforts directed to a given end. Time therefore must be allowed and all rush avoided. It is manifest that home lessons are out of place for infants.

One of the Mosely Commissioners says in regard to home lessons in the United States: "Each child takes care of his own set of books, carries them home and uses them there. Indeed home lessons seem to be general except among the very young children,"¹

Meals for Children.—Underfed children, ill clad and ill shod, are not uncommon in many urban schools. Sickly complexions, pinched faces, emaciated limbs, and other outward signs of the need of regular and proper nourishment

¹ Mr. H. Coward, Mosely Education Commission Report, 1904.

are often too apparent. A hungry child is necessarily unfit to receive all the benefits to be derived from attendance at school. The seeds of organic disease are frequently sown through continued ill-nourishment. The demands of school work are a continual drain on the nervous system, and when this is already enfeebled by insufficient nutriment, deterioration of physique is inevitable.

In the absence of voluntary organisations to meet cases like these, it is the teacher's duty to seek assistance elsewhere. The well-to-do children, in some schools, bring boots and other articles of clothing to aid their less fortunate school-fellows—do it, that is, unobtrusively through the head teacher; but the feeding difficulty must be met by other means. No child receiving help in clothing or food ought to feel degraded. The food should be the manna in the wilderness.

The Education (Provision of Meals) Act 1906 now provides that the local education authority may (1) associate with themselves any committee on which the authority are represented, who will undertake to form a "school canteen committee" to provide food for children; and the said authority may aid that committee by furnishing land, building, apparatus, etc., and such officers and servants as may be necessary for the purpose, provided the authority do "not incur any expense in respect of the purchase of food"; and (2) by the sanction of the Board of Education "spend out of the rates" a sum that will "meet the cost of the provision of such food," provided (a) that other funds are insufficient or not available for feeding the children, and (b) that the rate levied for the purpose does not exceed a halfpenny in the pound.

The School Library.—This is indispensable. Its value in forming character, in encouraging application, in reach-

ing the home, and in many other ways, is undoubted. "A school without an easily accessible library of at least a thousand volumes is really scarcely a school at all—it is a dispensary without bottles, a kitchen without a pantry."¹ In the United States practically every school either possesses a good library of its own or is directly associated with the public library, which co-operates with the school and supplies it with suitable books. The following extracts from Mr. H. R. Rathbone's report (Mosely Commission) will be found interesting: "A separate department for children has existed in the Boston Public Library since 1895. It occupies two rooms, one for recreative reading and the other for study, both furnished with low tables, chairs, and book-cases. Children over the age of ten years can be card-holders and may draw two books at a time. In the reference room (study room) lessons are studied, compositions written, and other preparations for school are done. One feature of the room which is constantly proving its value is the collection of text-books used in the Boston Public Schools. Teachers are invited to come to the Library with classes and themselves to give instruction or make use of books reserved for them as they may request." Mr. Rathbone further says that advice and assistance in the selection of books are given to the children by the officials in charge of the children's department.

Similar schemes of co-operation between public libraries and schools are now in operation on this side of the Atlantic. Every urban school at least should take advantage of the cheerful willingness of Borough Councils and their librarians to aid the schools in any reasonable way. But arrangements of this nature, no matter how complete, cannot supersede or replace the school library—the larger

¹ *Mankind in the Making*, H. G. Wells.

can only supplement the smaller. No public official can adequately discharge the advisory functions of the teacher who has, or should have, an intimate knowledge of his pupils. The library of a senior department should contain books suitable for *all* the children therein and should be worked systematically on a weekly or fortnightly basis. In the rooms occupied by the upper classes a list of books that every boy or girl ought to read might with advantage be hung on the walls. There should also be a reference library for teachers and reference books for each of the upper classes. The latter volumes—consisting of a standard dictionary and atlas,¹ a Whitaker's Almanac, the Children's Encyclopaedia, and possibly a general Railway Time Table—should be considered part of the equipment of such rooms and be always accessible.

League of Mercy, Guild of Courtesy.—Leagues and guilds of this character are usually associated with wide organisations external to the school, to which scholars may belong, a badge being worn by the children to indicate membership. In order to become a member, a child has to make a promise to adhere to the principles which the league or guild was established to foster. It is important that due care be exercised before admission to membership is allowed, which should be regarded as a privilege only to be obtained by a probationary period of good conduct on the lines upon which the league or guild is founded. Solemn promises made and soon broken do more harm

¹ Dictionaries and atlases should be provided for the scholars in the higher classes. In cases where the school does not possess a school library, arrangements should be made to supply books for the reading of the scholars by co-operation with organisations existing for the purpose or otherwise.—Art. 20, Code 1910.

than good. The school that does not train its pupils to think kindly of, and to act considerately towards, dumb animals, has lamentably failed in its duty.¹ The efficacy of these institutions might be easily sapped and even rendered baneful by affectation or pride on the part of its members. The spirit with which the badge is worn is everything: it should merely be a symbol of a pledge to do what is right and dutiful, *to do unto others as you would they should do unto you.*

School Lists.—School lists giving the names of pupils who have distinguished themselves by exemplary conduct, punctual and regular attendance, close industry, or general progress, act as a stimulus to some who are not readily responsive to ordinary school influences. They also serve to maintain a standard of high aim when that has been once reached.

Office Routine.—It is usual in most good schools to have posts of honour for highly deserving pupils, who perform monitorial duties of various kinds, certain other privileges being generally attached to office. The circle of influence is widened, however, by not confining these posts to a selected few, but by conferring them on all scholars in rotation who show they are worthy of trust and confidence. Such rotation, too, reduces the possibility of annoyance which sometimes comes from those who consider themselves permanent tenants-at-will. The duties of monitors are chiefly confined to routine. These duties

¹ Moral instruction should form an important part of the curriculum of every elementary school. The instruction should be specially directed to the inculcation of . . . kindness to animals, etc.—Art. 2, Code 1910.

inust not be allowed to interfere with their studies.¹ The election by ballot, once a month or once a term, of a class captain by the pupils, who is responsible, next to the teacher, for the proper conduct of the class, especially in the playground and playing fields, has been found a useful step in the direction of pupil self-government. But nowhere has this principle of self-government been carried out so successfully as in America.

The Hall Address.—Both in Germany and America the hall address is much practised. In the latter country it is sometimes given daily in a very brief way, usually preceded by reading some portion of the Scriptures without comment.

Once a week it is desirable for the head teacher to give an address to the whole school, the chief aim of which should be moral training.² It is hardly necessary to say that cold didactic lectures are quite useless for this purpose. If any good is to result from these weekly addresses, the incidents upon which they turn should be drawn from realities—from contemporaneous events, from history, from the Bible—using these as the vehicle for the praise of virtue and the condemnation of vice. Unless pleasurable emotions are excited in the contemplation of right-doing, and painful or contemptuous emotions by the review of wrong, ethical training cannot be directly effected.

The Honour and Merit Board.—This usually consists of a framed board on which are recorded the names of

¹ See Arts. 11 (f), 43 (c), and Schedule IV. (21), Code 1910. "The Board do not, however, prohibit the employment of young persons . . . to assist the teachers in matters of class routine, other than teaching."—President of the Board of Education in the House of Commons, March 11, 1907.

² See Art. 2, Code 1910.

pupils who have obtained scholarships or passed other examinations worthy of mention. Any noble acts performed by individual scholars should find permanent expression on the school walls in a similar way. These records especially serve to stimulate useful impulses, to impress upon the pupils the corporate life of the school, and to give it an historical interest.

The School Journey.—The school journey is based on the idea of a country holiday for the scholars, under the control and management of teachers, as a combined source of health, pleasure, and education.

As the journey may vary considerably in length of time and specific purpose, according to circumstances, it is probably best here to relate particulars of the journey as carried out in a London school, rather than give a description by mere generalisations.

In this school the Easter holiday is utilised for the purpose. The head teacher many weeks beforehand sends a communication to the parents announcing the objective of the journey and giving the probable cost, which varies from 21s. to 23s. 6d. for eight days.

Journeys have been made to Abergavenny, Chepstow, Malvern, etc., these places being chiefly used as a base for daily excursions. Generally about forty or fifty scholars, from Standard III. upwards, accompanied by three or more teachers, form the party.

Each boy is supplied with a hectographed guide-book of about forty pages, giving the following information:—

(1) The personal necessities for the outing, accompanied with general instructions. (2) The time-tables of the outward and homeward journeys from London. (3) Incidents of these journeys—things to be seen and

observed on the way—*e.g.* natural phenomena, centres of industry, public buildings, lines that meet at railway junctions, etc. (4) Itinerary for each day with brief notes on objects of interest. (5) Topographical maps, elevations and sections of hill ranges, geological sections of the various districts to be visited, sketches of fossils, etc. (6) Geological notes. (7) A list of the party. (8) Individual cash account, giving spaces for receipts and expenditure each day—checked daily by the teachers. (9) A blank register for the record of marks on conduct, cleanliness, and local knowledge. (10) An Index.

Al fresco and other lectures are given by the teachers. It is found that gentlemen of local standing gladly give their help to the party on matters in which they possess special knowledge, *e.g.* a vicar shows the party over his church, or a dean over a cathedral, pointing out architectural characteristics and beauties, and colouring its existence with historical fact; a local scientist gives lectures *en marchant* on the geology or botany of the district; a retired colonel accompanies the party to an old battlefield, fights the battle over again, or explains the mysteries of a fort or a Roman camp.

To illustrate some of the things accomplished by the party on these journeys, the following will suffice: (1) Traced a tributary from its source to entry into the main stream. (2) Climbed hills over 1000 feet high, and noted the counties seen, elevations and depressions, towns and villages, great landmarks, etc. (3) Searched for fossils, each boy bringing home a small collection. (4) Visited places of historical interest, such as ancient camps, Roman and British.

Each lad is examined daily on the knowledge obtained from his previous day's work, and entries are made in his guide-book accordingly.

As to cost, (1) the Railway Company carries the children at quarter fare; (2) modest temperance hotels take the children for 10s. or 11s. per week, including board, lodging, and service.

Many of the boys, as well as the teachers, carry a camera. At the close of each journey a descriptive photo-album is made, containing cuttings from the local press and other descriptive matter, which is preserved as a souvenir.

Some results:—(1) Cordial relations between teachers, scholars, and parents. (2) The scholars' exceptional interest in geography, geology, topography, and local history. (3) Strong tendency to improve the discipline and tone of the school.

Day, week-end, and even fortnightly outings of this character are rapidly growing into favour.

Some of the journeys recently undertaken are to the point, as they show the main objective, length of stay, and number of teachers and scholars:—(B.),¹ to Darley Dale, Derbyshire, June 2nd to June 16th (60), 5 teachers; (B.), to Stoneleigh Abbey, Kenilworth, July 6th to July 20th (20), 1 teacher; (B.), to Goudhurst, Kent (30), 2 teachers; (B.), to Whitstable, June 30th to July 14th (50), 4 teachers; (B.), to Denton, Sussex, June 18th to July 2nd (25), 2 teachers; (B.), to Malvern, June 25th to July 9th (25), 2 teachers; (B.), to Bexhill, July 11th to July 20th (30), 2 teachers; (B.), to Dymchurch, Kent (36 younger boys), July 1st to July 15th, 2 teachers; older boys (36), 1 teacher, 2 part of time; (G.), to Witlesham, Ipswich, classes of 40 taken for 3 weeks each during May to September, with 2 teachers.

¹ B. = Boys' department; G. = Girls' department. Number of pupils indicated in brackets. See also Educational Pamphlets, No. 21, *A School Week in the Country*.

The School Motto.—Each school should have its own motto—one so simple as to appeal to each of its scholars. A motto helps to give to a school a well-defined individuality, and adds to its life another trait that distinguishes that school from all others. It crystallises the central point on which the school's moral teaching hangs, and acts like a strong cement in binding its units together. History teaches how a phrase giving clear definition to a great principle will hold a multitude of people together, and transform them in aim into a homogeneous whole. In selecting a school motto it is well to request the parents, through the scholars, to suggest a briefly expressed sentiment for the purpose. This is practicable in most districts. The head teacher and staff could then select a few of those suggestions considered to be the best, and submit them to the vote of the whole school, with the view of adopting the one motto which most completely accords with the views of the majority. "The school should be the symbol of an eternal unifying spirit."¹

Fire Drill.²—Fire drill is essential. The school must, at various times, be called upon suddenly and unexpectedly to go through this drill at a given signal. This signal is generally the ringing of hand, electric or other bells, and the object is, of course, to effect a speedy clearance of the building without undue haste or excitement. Apart from the value of the drill as a safety measure in case of fire, it also trains the child to face unexpected and even dangerous situations with composure. It is an object lesson too in the desirability of prompt obedience.

The May Queen Festival.—Once a year, in some girls' departments, the scholars are called upon to select

¹ Words of the U.S. Commissioner of Education.

² Art. 2 (9), Code 1910.

their May Queen. Simplicity and purity of character, combined with sweetness of disposition, invariably carry off the palm on these occasions. At the festival which follows the queen is enthroned and crowned, and the children show their deference to her quality and submission to her authority. The Fairy Queen Fête is a similar institution for infant schools, the upper classes only taking part in the selection of the favoured one.

Clubs.—With regard to old scholars' clubs, it is lamentable to find, in large urban centres, scholars stepping over the threshold of the school at the leaving age and never crossing it again. They pass out of sight, like the shadow figures on the bridge in the vision of Mirzah.

Some provision should be made for keeping in touch with ex-scholars for at least three or four years, in order that the spirit of the school—assuming it to be good—may be kept active within them. This is all the more necessary in poor localities where surroundings are often depressing and where temptations are sometimes rife. The years from about 14 to 17 are the most perilous in life—more especially for the boy. "The dawn of puberty is soon followed by a stormy period of great agitation, when the very worst and best impulses in the human soul struggle against each other for its possession, and when there is a peculiar proneness to be very good or very bad. As the agitation slowly subsides, it is found that there has been a renaissance of either the best or the worst elements of the soul, if not indeed of both."¹

For these reasons, it is eminently desirable to have an ex-scholars' club in connection with each school, meeting say fortnightly or monthly, on a social basis. Such a club would emerge all the more naturally when societies or

¹ *Adolescence*, Dr. Stanley Hall.

clubs exist in the day school. For pupils, cricket and football clubs are possible in most places. A rambling club—occasional Saturday and evening outings—has been found most valuable too in many schools: photography, sketching, natural history, according to the bias of individual members, can thus come into play. A Shakespeare society—especially for girls—has also been found practicable, membership being confined to the upper classes. In this connection home effort takes a prominent part. *Objective*: (1) to study one or two plays in each year, (2) to dramatise certain parts, (3) to have some acquaintance with the poet's life and the places associated with it, and (4) to grow the flowers mentioned by Shakespeare, and to learn the sentiments expressed in connection with them.

Clubs should be regarded as indispensable adjuncts to school life.

The School Journal.—The school journal, issued monthly, in printed form, is, as a rule, only practicable in large schools, assuming that it must pay its own expenses. A journal has, however, been found possible in small schools, and also in some large ones, when taking hektographed or typewritten form. It is so useful in a multitude of ways, especially in conveying both necessary and desirable information to parents and scholars, that the wonder is it has not been generally adopted. As a stimulus to thought among the scholars, whose compositions when of exceptional merit should be inserted in the journal, it has few rivals. But what is equally important is this—it is the monthly message from school to home.

In districts in which the schools do not lie very far apart it seems quite practicable to have a room, occupying a central position, fitted as a miniature printing office, for the use of the neighbouring schools. The upper standard scholars

could then have one lesson a week in type-setting and printing—valuable instruction in itself—and thus be able to set up and print the journal for their own schools.

The Tooth-brush Club.—The proper care of the teeth has an important bearing on health. The habit of tooth-cleansing should therefore be formed early.

“What is known as a ‘Tooth-brush Club’ has been formed in certain day schools, and has been of service in improving dental cleanliness. The head teacher or the Care Committee lays in a stock of tooth-brushes which can be obtained wholesale for $2\frac{1}{2}$ d. each; these brushes are then, after some preliminary dental instruction, sold to the children for $2\frac{1}{2}$ d. each, paid in instalments of $\frac{1}{2}$ d. or $\frac{1}{4}$ d. a week, the small profit being used to supply tooth-brushes to very poor children.

“Precipitated chalk is also sold in halfpennyworths, and it is found that numbers of the children readily join the clubs, and some even save their money to buy tooth-brushes as birthday presents for their parents, and one boy went on his own initiative into the streets at Christmas to sell toys in order to obtain money to join the tooth-brush club. The tooth-brushes are called for inspection periodically, and on every convenient occasion the necessity for tooth-cleaning is insisted upon.”¹

The Flower Show.—The scholars are encouraged to grow flowers at home, and to exhibit them at the annual show usually held on the school premises in July, when prizes are awarded for the best relative efforts in plant cultivation and also for skill (among the girls) in table decoration. The infants are expected to grow their plants from seed, and the pupils of the senior departments may

¹ See Report of L.C.C. Medical Officer, 1910.

obtain their plants for cultivating purposes either through the school by purchase, or from any other source. The award of prizes at the show is usually based on these three classes. The usefulness of an institution of this kind is apparent. There is not only the brightness which the flowers infuse into the homes, but there are also the intense pleasure and continuity of effort on the part of the scholar in cultivating things of beauty which cannot fail to have their salutary effects.

Visits of Nurses.—A system of school visitation by trained nurses is in operation in many educational areas. Children cannot fully profit by school discipline if their heads and clothing are not clean, and those who are properly cared for by their parents have a right to be protected from contact with dirty scholars. The nurses therefore examine the scholars in some schools. Those who are not in a satisfactory condition receive a card to be delivered to their parents, who are instructed thereon to take certain curative steps for cleansing purposes, and further advised that, if within a week the cleansing has not been effected, the children in question will be separated from their school fellows until the unclean condition is remedied. There are further measures, calculated to wear down all resistance, if parents are found obstinate in these initial stages.

Medical Inspection.—Under section (13) of the Education (Administrative Provisions) Act 1907 it is incumbent on the Local Education Authority "to provide for the medical inspection of children immediately before, or at the time of, or as soon as possible after, their admission to a public elementary school, and on such other occasions as the Board of Education direct, and . . . to make such

arrangements as may be sanctioned by the Board of Education for attending to the health and physical condition of the children educated in public elementary schools."¹

The "School City" Method of Government.—This aims, as the name implies, at governing a school chiefly by means of its pupils in a similar way to that adopted by adults in the government of a city. Space forbids details. This plan is successfully carried out in many American schools.

General Remarks.—But these devices as aids to discipline will be next to useless unless thoroughness characterises all that are called into use. They are not intended to curb personal liberty, nor to restrain activities, but to guide and direct them into fruitful channels, and to serve useful ends. "All things are moral. That soul, which within us is a sentiment, outside of us is law."²

The admirable words in the Introduction to the Code of 1910 give an immutable standard of aim in all that concerns the school: "Teachers can do much to lay the foundations of conduct. They can endeavour, by example and influence, aided by the sense of discipline which should pervade the school, to implant in the children habits of industry, self-control, and courageous perseverance in the face of difficulties; they can teach them to reverence what is noble, to be ready for self-sacrifice, and to strive their utmost after purity and truth; they can foster a strong sense of duty, and instil in them that consideration and

¹ See also Board of Education's Circulars 576, 582, 596; and the Board's Minute, dated June 25, 1910, which demands medical inspection of "all children admitted to the school" in any year ending July 31, "and all children who are expected to leave school" in that year.

² Emerson.

respect for others which must be the foundation of unselfishness and the true basis of all good manners; while the corporate life of the school, especially in the playground, should develop that instinct for fair play and for loyalty to one another which is the germ of a wider sense of honour in later life.

“In all these endeavours the school should enlist, as far as possible, the interest and co-operation of the parents and the home in an united effort to enable the children not merely to reach their full development as individuals, but also to become upright and useful members of the community in which they live, and worthy sons and daughters of the country to which they belong.”

CHAPTER VII.

"The keeping or checking of school registers" is of "vital importance."—*Pref. Memorandum*, Code 1910.

SCHOOL RECORDS AND REGISTRATION.

BOTH records and registration, on the lines laid down by the Board of Education, are necessary to obtain recognition as a public elementary school. The principal objects of these are to ensure and preserve an historical account of the growth and development of the school as a whole or any variations in its numbers, its efficiency, or its staff; to have a statement concerning each scholar—his name, address, date of birth, progress, daily attendance and date of withdrawal; to supply the necessary figures and information to the Board of Education as a basis for the annual grant; to supply information to the bye-law authority in order that attendance may be enforced, or exemption granted; and, finally, to have a properly authenticated record of reports received and grants allowed.

Every school must have three kinds of registers, viz. (1) the register of admission, progress and withdrawal, (2) the class attendance registers,¹ and (3) the summary register. The first and second of these are chiefly concerned with individual scholars, while the last deals collec-

¹ Including a partial exemption register if part-time scholars are in attendance.

tively both with the groups of children in the form of classes, and with the school as a whole.

The *general* conditions to be observed in regard to registration are thus laid down by the Board of Education¹:—

“Attendance” for the purpose of ascertaining the average attendance of a school may be reckoned in accordance with the following regulations. The rules of Schedule IV. must govern the registration of attendance.

(a) No attendance may be reckoned for any scholar (1) who is under three or (2) over 16 years of age at the close of the school year, provided the latter limit has not been extended under Section 22 (2) of the Education Act, 1902, or for any scholar while habitually employed as a monitor.²

(b) For each infant present at secular instruction during one school meeting for a period of not less than one hour and a half there *should* be reckoned one attendance. The one hour and a half may include the recreation interval.

(c) For each scholar other than an infant scholar present at secular instruction during one school meeting for a period of not less than two hours—including the recreation interval—there should be reckoned one attendance; and

(d) For each such scholar who is allowed partial exemption there may be reckoned, in addition, half an attendance, subject to the following limitation:—

“the total of the additional attendances allowed in the case of any partial exemption scholar may not exceed the number which, when added to the number of his two-hour attendances during the school year (or that portion of the year which has elapsed since he became a half-time scholar) gives the number of the school openings in the corresponding period.”

¹ Arts. 43-49 and Schedule IV.

² Art. 43 (c):

In making up the minimum time constituting an attendance there may be reckoned—

“(i) any time occupied by secular instruction, according to the approved time-table, given to the scholars elsewhere than at the school;

“(ii) any time occupied, with the sanction of the inspector, and under arrangements approved by him, by school journeys or rambles, or visits paid during the school hours to places of educational value or interest;

“(iii) any time occupied by a central examination (other than for labour certificates) attended by scholars with the sanction of the inspector, provided that the time allowed for examination be not less than one hour and a half;

“(iv) any time occupied in attending at a training college or centre for pupil teachers, or other place approved by the Board, for the purpose of model or criticism lessons;

“(v) the necessary period for recreation. The period for reaction, in the case of infants under five years of age, must be fifteen minutes, and may be extended to half an hour; and in the case of scholars over five years of age must be ten minutes. More recreation may be given, but only when the period of secular instruction, inclusive of recreation, is prolonged beyond the necessary one and a half or two hours;

“(vi) a period occupied during the school hours, under arrangements approved by the Board, in properly organised games for older children under competent supervision and instruction. The period so occupied must be confined to one morning or one afternoon in each week, and must be not less than half an hour or more than two continuous hours, exclusive of the time, if any, spent in going to or returning from the playing field;

“(vii) any time spent during the ordinary school term

under arrangements and according to a time-table approved by the Board at an open-air school, school camp, or other place selected with a view to an improvement of the health and physical condition of the children. The Board may at any time require the local education authority to furnish them with a special report by the school medical officer on the working and effect of any arrangements made under this Article. For the purposes of this Code 'school medical officer' means a medical officer named by the local education authority, and recognised as such by the Board. In exceptional cases the Board will recognise separate school medical officers for separate parts of one area ;

"(viii) any period occupied by a medical inspection of scholars conducted by or under the authority of the local education authority in pursuance of the requirements of Section 13 of the Education, (Administrative Provisions) Act, 1907, whether such inspection is conducted in the school premises or (in special circumstances) in some other place appointed for the purpose by the local education authority with the approval of the Board.

"The school, department, or infants' division must have met not less than 400 times in the school year."¹

The admission and daily attendance of the scholars must be carefully registered by, or under the supervision of the head teacher, and must be duly verified from time to time—at least quarterly—by the managers or some responsible officer appointed by the local education authority.

General Rules for the use of Registers.

1. "The names of the school, of the department, and, in the case of attendance registers, of the class, must be

¹ There are three exceptions to this rule. See Art. 45.

distinctly written on the cover of each register, and on the title-page there must be the signature of the correspondent and the date on which it was issued to the teacher.

2. "The pages of all registers must be numbered consecutively, no leaf must be inserted in or withdrawn from any register, and no blank spaces should be left between the entries.

3. "Entries must be original and not copies, and must be made in ink without erasure or insertion.

"If it is necessary to make any correction this should be done in such a manner that the original entry and the alteration made are both clear on the face of the record.

"During any time in which school registers are with the Board for inspection, under Article 48, the record of attendances made by each scholar must be kept in a temporary register, and the totals of such attendances must be transferred to the original registers as soon as these are returned by the Board. The temporary register must be preserved.

4. "Registers should be kept for ten years after they have been filled.

"The head teacher of a school or department is held responsible for the proper keeping and preservation of the records of that school or department, and should not delegate to a subordinate any part of this work except the keeping of attendance registers.

"Pupil teachers of the first year may not be employed in registration, other pupil teachers may register the attendances of their own classes."

Special Rules for Admission Register.

1. "An entry should be made in the admission register for each scholar on his admission to the school. No name should be removed until the child is exempt from the legal

obligation to attend school, unless it has been ascertained that he or she is dead, is attending another school, or has left the neighbourhood. If no information is obtainable the name may be removed after a continuous absence of four weeks.

2. "Successive numbers must be allotted to the scholars on their admission so that each may have his own number, which he should retain throughout his career in the school or department. This number will then serve to identify him.

"When any scholar whose name has been removed from the register is readmitted, a new entry must be made, but the scholar should resume his old number and cross reference should be made to the entries.

3. "This register must show distinctly for each scholar who has actually been present in the school—

- (a) His number on the register.
- (b) The date of his admission (and re-admission)—
day, month, and year.
- (c) His name *in full*.
- (d) The name and address of his parent or guardian.
- (e) Whether exemption from religious instruction or from attendance at the school during the time of religious instruction, where the bye-laws permit this, is claimed on his behalf.
- (f) The exact date—day, month, and year—of his birth.
- (g) The last school he attended before entering this school. If this is his first school, the word 'none' should be entered in this column.
- (h) If he has left, the date of his last attendance at this school and the cause of his leaving.

4. "This register should have an alphabetical index."

Rules as to the Provision of Attendance Registers.

1. "In each school or department in which both infants and other scholars are taught there must be separate sets of attendance registers kept for each, and no attendances may be transferred from one to the other.¹

2. "For each class in a school or department there should be a separate attendance register, containing the names of all children in the class, including partial exemption scholars, if any.

3. "Each class containing children above and below the age of five years must have two registers, one for those above, the other for those below that age, and similarly for classes containing scholars above and below the age of fifteen years.

"The name of a child must be transferred from one of these to the other not later than the end of the week in which he attains his fifth birthday."

Registers for Special Classes.

For any class in a subject for which a special grant is paid under the Code, or for any class in the ordinary subjects held in accordance with the time-table elsewhere than at the school, there must be a special register.

In these registers the dates of meetings and the times during which the scholar is under instruction at the meetings must be accurately shown.

The special classes refer to instruction in cookery, laundry, housewifery, combined domestic subjects, dairy work, gardening, and handicrafts,² which are usually but not necessarily taught at centres.

¹ See Art. 31.

² See Arts. 34 and 44 (a), also Schedule III.

Special Rules for Attendance Registers.

1. "There must be columns for the admission numbers and names of the scholars, both of which must invariably be entered at the same time.

"There must be a column for the attendances at each meeting in the school year. Each of these columns should be properly dated before any entry of attendance or absence is made in it. The columns must be grouped in weeks, and at the foot of each there must be spaces for entering the total number of children present when the registers are marked for the last time, and the total number withdrawn before completing an attendance.

"There must be spaces for recording the total attendances in the quarter or term made by each child.

2. "If school fees are entered in the register, they should be kept quite separate from the entries of attendances; the best place will be the extreme left of the page before the names of the scholars.

3. "The approved time-table must provide adequate time at each meeting of the school for marking the registers, and this time must end before the commencement of the minimum time constituting an attendance.

"The attendance registers should be marked for the first time as soon as the school or department is open according to the time-table. No instruction received by a scholar before the register is marked for the last time may be reckoned towards the minimum amount of secular instruction required in order that an attendance for the purposes of grants under the Code may be counted.

"The marking of the registers for the afternoon meeting may not commence within an hour of the close of the morning meeting, except on occasions for which the special sanction of the Board has been given to a shorter interval.

This proceeding is very undesirable, but special cases may occur, such as those of country schools in the North during the winter, where there is good reason for making the afternoon meeting of the school follow the morning meeting after a short interval.

4. "During the time set apart for registration at every meeting of the school—

Every scholar whose name has been entered in and not removed from the admission register must be marked \ (present) or ○ (absent).

Before the completion of the time set apart for registration the number of scholars marked present must be entered in the space provided, and to ensure accuracy a count of those actually present should be made before the number is recorded.

5. "During the minimum time constituting an attendance—

The mark of presence of any scholar who leaves before completing an attendance must be cancelled at once by drawing a ring round it thus, (○).

But this need not be done in the case of a scholar leaving the school for instruction in a special class held outside the school, unless it is subsequently ascertained that such scholar has not completed the minimum time constituting an attendance.

The number of the scholars whose marks of attendance have been cancelled must be entered in the space provided, before the end of the meeting.

6. "Any scholar marked absent at any meeting who is found—when the registers of a central class for cookery, drawing, science, etc., or the registers of attendance at museums or other approved places are examined—to have received at the time of that meeting at least two

hours of secular instruction at such class or partly at such class and partly at the school, may have the letter C, D, S, M, A, etc., entered inside the mark of absence, thus (C) (D) (S) (M) (A). All attendances so registered should be added to the total attendances of each child concerned at some time not later than the end of the school year.

7. "When a child is excluded from the school by reason of a requirement under Article 57 of the Code, or any provision of an Act of Parliament, or under the authority of the School Medical Officer, his mark of absence should be entered thus, (X), the X being added in red ink.

"At every meeting at which a scholar is employed as a Monitor, he must be marked thus (Z).¹

8. "When the school does not meet on an occasion for which space is provided in the registers, this space must before the next meeting be cancelled by one or more lines being plainly drawn through it. The reason why the school did not meet should always appear in the log-book. For longer periods 'holiday' should be written across the column.

9. "The attendance registers must be marked every time the school meets, however small the attendance, and the meeting must be counted in, ascertaining the average attendance.

N.B.—In country districts, where the children have to come from some distance to attend school, a meeting of the school may occasionally be abandoned without previous notice on days when, owing to inclement weather, the attendance is so small as seriously to interfere with the ordinary working of the school.

¹Arts. 11 (f) and 43 (e).

In such a case, the children who reach the school so wet that sitting in school for the usual school hours is likely to be injurious to their health, should be sent home at once. The children not likely to be injured by remaining for the usual school hours may be admitted and allowed to receive instruction without the registers being marked or the meeting reckoned. Whenever this is done, an entry must at once be made on the register to the effect that the meeting has been abandoned, full particulars of the circumstances must be entered in the log-book, and a record should be kept of the numbers sent home and retained in school respectively."

Rules for the use of the Partial Exemption Register.

1. "A separate register must be provided for partial exemption scholars. The name of no scholar should be entered in this unless he is ascertained to be a partial exemption scholar.¹

2. "At the close of each week, the number of the two-hour attendances made by each of the partial exemption scholars during the week must be ascertained from the class registers and posted in the partial exemption register.

3. "At the end of the year a list must be drawn up and signed on behalf of the Local Education Authority, certifying (a) the number of two-hour attendances made by each partial exemption scholar, (b) the addition claimed on his behalf. This addition may not exceed—

(i) *One-half* of the two-hour attendances made by the scholar during the year or that portion of the year

¹ Art. 43.

during which he has been a partial exemption scholar; nor

- (ii) Such a number as, when added to the number of his two-hour attendances during the year or that portion of the year during which he has been a partial exemption scholar, will give a total equal to the number of meetings of the school during the same period."

Rules as to the Register of Summaries.

1. "All entries in the register of summaries, whether for a class or for the whole department, must be given separately for children below and above the age of five years and for those below and above fifteen years of age.

2. "At the close of each week or part of the week during which the school has been open the following entries must be made in the register of summaries in respect of that period—

- (1) The number of meetings of each department.
- (2) The total attendances of each class.
- (3) The total attendances of each department.
- (4) The average attendance of each department.
- (5) The highest number on the roll during the week.

3. "At the end of the school year the average attendance for the year should be ascertained for each section of a school or department for which a separate grant on average attendance is payable, by dividing the total attendances made in that year by the number of meetings of the corresponding section of the school or department. The average attendance for children below and above the age of five years must be separately ascertained.

4. "The average attendance of scholars above the age of fifteen years must be separately ascertained for the purposes of grant, since no fee grant is payable in respect of scholars over fifteen years of age.

5. "An entry must be made in the register of summaries of the classification of the children of each sex according to their ages on the last day of the school year."

Verification of the Registers.

1. "The Managers are held responsible for the supervision and effective verification of the registration, and at the end of the school year are required to certify—

(1) that the registers have been accurately kept in accordance with the rules of this schedule; and

(2) that the accuracy of the registers has been tested by the managers on several occasions and the result recorded in the log book.

2. "In order to be able to give this certificate and properly to check the registration, Managers are expected to visit the school without notice, at least once in a quarter, at some time during the period of secular instruction, required in order that an attendance may be counted for grant, so that they may see that the registers have been properly marked and closed in accordance with the requirements of the Code and of this Schedule.

3. "In the case of a school which, under Section 6 of the Education Act, 1902, has no Managers, a responsible officer appointed by the Local Education Authority must discharge the duties named in Rules 1 and 2."

Reference facilities will be increased by entering the surnames first on the class and admission registers. In the case of the class registers it is best, too, to arrange the

names in alphabetical order. The greatest care should be taken to see that these registers are *closed to time*, and that the total number at the foot of the column corresponds with the number of children present. It is usual to indicate a punctual attendance by a red mark and a late attendance by a black one. In lieu of having the class registers divided into four quarters, it is thought that a three term division would be a more convenient arrangement. Such registers are being introduced in some districts. Class registers should be preserved "at least ten years."

Admission and summary registers "must never be destroyed." The kind of information to be obtained from the summary will be seen from the tabulated forms below.

WEEKLY RECORDS.

Class or Standard.	Roll.		Total Attendances.		Per- centage.	Week ended	No. present every morning and afternoon.
	Under 15.	Over 15.	Under 15.	Over 15.			
						Mon. M. A.	
						Tues. M. A.	
						Wed. M. A.	
						Thur. M. A.	
						Fri. M. A.	
Totals							

The yearly records include the following and also a table similar to that containing the quarterly records, in which the corresponding numbers for the four quarters are set out and summarised in order to give the annual figures.

	Years of age.	Nos.		Nos.
Total number of children on admission register on last day of school year.	3 and under 4		No. of scholars admitted during the year	
	4 " " 5			
	5 " " 6			
	6 " " 7			
	7 " " 8		No. of scholars left during the year	
	8 " " 9			
	9 " " 10			
	10 " " 11			
	11 " " 12		Average attend- ances for year ...	
	12 " " 13			
	13 " " 14			
	14 " " 15		Etc.	
	15 and over			
Total				

Bye-law Returns.—Bye-law returns have, as a rule, to be made by teachers weekly, annually, and occasionally. The weekly returns usually consist of the attendances of each scholar made on a form which is a "duplicate" of the class register. In some areas, however, the "slip" system has been introduced with great success. In this system, each scholar's name is entered on a separate "slip" of paper, whereon his attendances for a quarter or term are recorded week by week.

The annual return is of a more elaborate character and takes the form of a summary of attendances of the year for each department, chiefly based upon the ages and

classification of the children. Occasional returns sometimes refer to individual scholars whose parents are about to be summoned before a magistrate for irregularity of attendance.

Records of School Progress.—Records of school progress during the educational year are necessary to satisfy the requirements of the Board of Education and local education authorities. To secure completeness in these records, it is desirable to furnish each class with three books: (1) the progress and report book, printed forms of which can be obtained from most educational publishers; (2) an ordinary exercise book for the teacher to record briefly the work done week by week; (3) the teacher's note-book; intended mainly for such memoranda as involve due preparation of lessons.

Most progress and report books are framed on the basis of half-yearly or term examinations by the head teacher. Assuming that periodical examinations are held, then the book should contain:—(1) For each term or period and each subject of instruction, a brief résumé of the work proposed to be done, together with a space for the head teacher's criticisms. (2) A further space in which the head teacher can at the end of a given period summarise the value of the work and the conduct of the class as a whole under such general headings as (a) instruction, (b) discipline, (c) punctual and regular attendance. (3) An individual schedule of the scholars, on which may be shown the progress of each pupil in the various subjects that constitute the curriculum. (4) Blank sheets on which may be recorded the tests given at the examinations, and also the proposed syllabuses for the year.

It is evident that syllabuses ought to be carefully pre-

pared before the commencement of the year in which they are to be put into operation. They should, as a rule, be graded into three courses and made to overlap to some considerable extent. Above all, each syllabus should be so elastic as to adjust itself to the needs of the class from time to time. The head teacher's criticisms should be reasonably exhaustive, and aim at being especially helpful to the class teacher.

The progress book should only be used for the first class in an infant school and might well take a more general form than that indicated here.

The Child's Book.—Many years ago the Board of Education instituted a "child's book," which contained most of the information now recorded in the admission register in connection with each scholar's name. This book was intended to be a complete record of the child's educational progress, and practically to become, when the time arrived, his leaving certificate. The "child's book" was, however, abandoned after a short trial. Some simple form of certificate similar to this seems desirable. In the French schools,¹ a book of this kind exists, for each scholar enrolled in a primary school receives a *cahier de devoirs mensuels*, or exercise book, in which he records the first lesson of each month during his school life. This has to be done entirely without aid. The purpose of this book is indicated thus in an official circular: "Une chose importe, et c'est la seule: qu'il existe dans toute école et pour tout enfant sans exception un cahier gardé avec soin, qui, d'une manière, ou d'une autre, et par un nombre suffisant de spécimens empruntés aux diverses époques de sa scolarité, puisse fournir au bout de quelques années une preuve

¹ See "Rural Education in France," by J. C. Medd, Special Reports, Vol. 7.

irrécusable de la régularité de ses études et la trace de sa propre assiduité ou de ses absences."

P. T. and S. T. Records.—It is now essential to keep records of the work done by student teachers and pupil teachers in the day schools. These records should briefly indicate for each session the time spent (1) in criticism lessons, naming the classes or standards in which such lessons were given; (2) in work other than actual teaching—the kind of work to be named and the class or standard with which it was associated; (3) in actual charge of a class or section, the size and grade of the class being given; (4) in work done in combination with the class teacher. The conduct and progress of the pupil or student teacher should be summed up by the head teacher at the close of each quarter or term.

Records should be entered in a journal kept entirely for that purpose—one journal for each pupil or student-teacher.

Medical Inspection and Records.—In Germany the school doctor has become a recognised institution. All primary schools are subjected to periodical medical inspection. The doctor's duties vary a little according to district, but, generalised, they may be said to be:—

- (1) To examine every scholar as to condition of health and to take his weight, height, chest, and other measurements.
- (2) To deal promptly with any suspected cases or conditions which concern the health of individual children or the school as a whole.
- (3) To examine periodically the school buildings and report on any hygienic defects.
- (4) To examine children proposed for the special or defective schools.

In the Charlottenburg schools scholars are medically classed as "under control" and "normal," the former being examined periodically by the doctor, and anthropometric figures duly recorded. The resulting health schedules are carefully preserved.

In America child study departments, in which anthropometric statistics are collected and tabulated, have been established at some large centres. A similar system of weighing and measuring children has been adopted by a branch of the Child Study Association at Liverpool. Sir James Crichton Browne, M.D., urged in 1884 "the systematic measurement of the children in all elementary schools" as supplying "information of the highest practical and scientific value."¹

Under Section (13) of the Education (Administrative Provisions) Act, 1907, the powers and duties of a local education authority under Part III. of the Education Act, 1902, shall include the duty to provide for the medical inspection of children immediately before or at the time of or as soon as possible after their admission to a public elementary school, and on such other occasions as the Board of Education direct, and the power to make such arrangements as may be sanctioned by the Board of Education for attending to the health and physical condition of the children educated in public elementary schools;² provided that in any exercise of powers under this section,

¹ See *Over-pressure in Elementary Schools*, 1884, and Report of the Third International Congress for the Welfare and Protection of Children, 1902.

² The Board must be satisfied that provision has been made for the medical inspection of all children admitted to the school in the year, and of all children who are expected to leave school in the year—the year in each case being the twelve months ending on the 31st of July.—Minute of the Board of Education, June 25th, 1910. See also Circulars 576, 582, and 596.

the local education authority may encourage and assist the establishment or continuance of voluntary agencies, and associate with itself representatives of voluntary associations for the purpose.

"There are two distinct purposes in medical inspection. The children may be inspected in great detail twice, thrice, or more often in their school life. This method is costly in time, and scarcely likely to be fully appreciated in the results obtained. Thoroughly done, it would be of great value to the community, but from this point of view equally good results can be obtained, for one-twentieth of the work done, by random sampling. It is, for instance, quite unnecessary to weigh and measure all children; only very undersized or debilitated children need be weighed, and children who are not doing their school work well might have weights regularly noted; but for statistical purposes or social investigation, weighing and measuring need only be done in cases where an intensive study of the children is taking place, and in these cases as full and accurate notes as possible should be made. It is necessary to work with smaller numbers and more accurate returns, and this might well be confined to the work of the sixteen school doctors. For the majority of children there is little value, practically, in all the details of medical inspection as usually and fully set out; the purpose is to ascertain present conditions which require remedy, and for the majority the sole purpose should be noting conditions which require medical or educational treatment. The work of the assistant school doctors should be directed to this, and all other observations, unless for the doctor's own satisfaction, might be omitted. The reduction in the cost of the work would be very considerable, and the practical results equally good."¹

¹ See Report of L.C.C. Medical Officer (Education), 1910.

Ophthalmic Records.—It has been the practice in many educational areas for the teacher annually to test the eyesight of the scholars by means of charts supplied for that purpose. The records of these tests are preserved and entered on the class registers; the scholars are arranged in the class accordingly; and the oculist supplements the teacher's investigations in all cases in which the vision is defective, and sends "advice cards" to the parents. Serious defects in vision are often caused by the habitual insufficiency of the distance of the scholar's eye from his work. From five to ten per cent. of the children in public elementary schools suffer from defective vision. Nervousness, headaches, and premature fatigue are the result in the absence of remedial measures.

Aural Records.—By investigation¹ it has been found that from thirteen to thirty per cent. of children suffer from defective hearing in one or both ears. Mouth breathing, a heavy look, variable powers of hearing, general dulness, inattention, and variable intelligence are the usual symptoms of deafness. In minor cases deafness becomes accentuated by a cold, and varies in degree from other causes according to the general health. In instances like these, and also in the case of deafness in one ear only, defective hearing becomes difficult to detect by the teacher. Great vigilance and care are therefore necessary, for the moral effect of condemning children for disobedience or inattention when these are the natural outcome of sensory defect, temporary or permanent, is too evident to be named. Scholars apparently hopelessly dull and inattentive have been found, when the causes of deafness have been removed, to be very intelligent and obedient. It is desirable that the teacher should be ever watchful for

¹ See *Fundamentals of Child Study*, by E. A. Kirkpatrick, 1904.

defects of this kind and keep records of his observations. A periodical system of testing aural and other physical defects, by medical men, must now be put into operation by each education authority; but this should not lessen the teacher's care and watchfulness in all such matters.

Defectives' Records.—A form similar to that on the next page, signed by the teacher of the ordinary school which the child has been attending, has been found useful as the basis of records by the "special" teacher and of enquiry by the Medical Officer.

Thermometric Records.—Every central hall and each class-room should be supplied with a thermometer and the temperature taken and recorded at least twice a day. The best times for taking the temperature are considered to be at 9 a.m. and 3.30 p.m. The temperature external to the school should also be recorded by means of a thermometer facing North. It is well for these records to take the form of a quarterly chart, which should be hung in a conspicuous position on the class-room walls. In case of consistent insufficiency of warmth, the defect should be reported at once to the local authority. The temperature of a class-room should not, as a rule, be below 55° at 9 a.m.

Board of Education Regulations re School Records.

—"Every school must have:—

(a) "A diary or log book which should be a bare record of the events which constitute the history of the school.

"The log book should be stoutly bound and contain not less than 300 ruled pages. It must be kept at the school under the care of the head teacher, who should enter in it, from time to time, such events as the introduction of new books, apparatus, or courses of instruction, any plan of lessons approved by the Board, the visits of managers, absence, illness, or failure of duty on the part of any of the school staff, or any special circumstance affecting the school that may, for

DEFECTIVES.—ADMISSION FORM.¹

- | | | |
|---|-----|-----|
| 1. Name of child | ... | ... |
| 2. Address in full | ... | ... |
| 3. Date of birth | ... | ... |
| 4. How long has the child attended | | |
| (a) this School? | | |
| (b) any other School? | | |
| 5. What is the appearance of the child — Stupid or bright? | | |
| 6. Is the child : 1. Obedient ; 2. Mischievous ; 3. Spiteful? | | |
| 7. Are the habits of the child correct and cleanly? | | |
| 8. Are the propensities of the child peculiar or dangerous? | | |
| 9. What is the mental capacity of the child ? | | |
| 1. Observation. | | |
| 2. Imitation. | | |
| 3. Attention. | | |
| 4. Memory. | | |
| 5. Reading (equal to Standard) | | |
| 6. Writing (equal to Standard) | | |
| 7. Calculation (equal to Standard) | | |
| 8. Colour. | | |
| 9. Special tastes. | | |
| 10. Is the child affectionate or otherwise? | | |
| 11. Has the child any moral sense? | | |
| 12. Have you any other information bearing on the case? | | |

Signed _____

School _____

Department _____

Date _____

[Children UNDER SEVEN should not, as a rule, be nominated
for admission to a Special School.]

¹ In use in London (under the L.C.C.). There is another simpler form in use for those defective other than *mentally*.

the sake of future reference or for any other reason, deserve to be recorded. It should contain *statements of fact only* and no expressions of opinion on conduct or as to the efficiency of the school, except as provided by Art. 23.

"Entries in the log book should be made by the head teacher as occasion may require. Entries should be made only by the head teacher, by the correspondent, by the managers who check the registers or by the officer (if any) authorised by the Local Education Authority.

"The log book should contain an explanation of the reason for the closing of the school on all occasions on which it is closed. It should also contain an account of all important variations in the attendance, and all deviations from the ordinary routine of the school."

(b) A book for recording minutes of managers' meetings.

(c) A portfolio to contain official letters.

(d) The Code of the Board of Education in force for the time being.

(e) A punishment book in which all cases of corporal punishment must be recorded.

School Conference Records.—It is desirable that the minutes of all School Conferences should be entered in a book kept for that purpose within a few days of each meeting; and when these Conferences assume inter-departmental form, the minutes, as soon as recorded, should be signed by the head teachers concerned. It is needless to say that minutes should be of a purely formal character, but sufficiently wide, in the absence of unanimity, to cover expressed individual opinions.

The Three Years.—For purposes of records and other matters there are three different years associated with every school, viz. the calendar year, for certificates of exemption by attendance; the *school* year, for finance and annual returns to the Board of Education; and the *educational* year, at the commencement of which most of

the great changes in organisation and promotion of scholars are made.

There are three cases in which the *school* year is a national fixture, viz. that for all Higher Elementary Schools, for "Special Subjects," and for Pupil and Student teachers. In each instance the year begins on August 1st and terminates on July 31st.

CHAPTER VIII.

"Natural things and spiritual—who separates these two . . . deals ignorantly with men."—*Aurora Leigh*.

"Training is everything. The peach was once a bitter almond; cauliflower is nothing but a cabbage with a college education."—
MARK TWAIN.

THE SCHOOL IN RELATION TO LOCAL ADMINISTRATION.

Need of exceptional treatment of children in two directions:—the talented scholar; the defective or backward scholar.—The classification of children in school departments is mainly based on the capabilities and attainments of the normal scholar; but every-day experience points to the desirability or necessity of differentiating him from the talented child on the one side, and from the defective scholar on the other. Defective children may be defined as those who show a pronounced inability to learn under the ordinary conditions of school life.

Definite and extended arrangements—extended, that is, beyond the regular department—for the talented child only come into operation, as a rule, when he has reached one of the upper classes in the ordinary school. He can then generally be drafted to the superior primary school either by examination or nomination, according to the practice of the district, or, through the agency of a scholarship, secure admission to a secondary school.

On the other hand, the defective scholar needs to be specially catered for in the earlier stages of his training. He is generally so far behind the normal child in both physical and mental development that he not only falls hopelessly in the rear when educationally associated with children of average power, but otherwise suffers because—to use a Spencerian phrase—he is altogether out of correspondence with ordinary school environment. Moreover, a feeble-minded child occasionally displays such moral depravity in the form of spitefulness, cruelty or perverted affection as may become a source of danger to others unless watchfully governed and supervised. It has therefore been considered necessary, both in the child's interests and from motives of State policy, to make special provision for his education.

It has been calculated that about one per cent. of the children attending elementary schools belongs to this defective type. The interdependence of mental power and physical development is now generally admitted, experience showing that where the body is not normally developed there is a corresponding arrest in *mental* development. In the same way it has been found by experiment that physical superiority in childhood gives greater vital capacity and mental grip. Moreover, "actual tests of the memory power show that the larger and stronger pupils are superior in native force of memory to the smaller and weaker. The true explanation will probably be found in the fact that those conditions which bring about large growth are favourable to the perfect formation and ideal balance of the brain and vital organs."¹

Germany was the pioneer in this enterprise of special classes for defective children. The late Education Autho-

¹ See Child Study Report No. 3 in connection with the Chicago Public Schools.

rity for London, appreciating the value of the unique training in the *Helfsschule*, was the first in this country to establish similar classes. This was done in 1892. The movement in 1899 received State recognition by the Defective and Epileptic Children Act, and led the way to the formation of such classes in other large towns of England as well as in the United States.

On the other hand, the broader obligations imposed on education authorities, recently created by the Education Acts, place within the limits of their power and administration, under certain conditions, the establishment and supervision of secondary schools and other institutions for higher education, which have long needed State assistance and recognition. The regulations¹ issued by the Board of Education must materially assist in putting these institutions on a sound organised and progressive basis. Therein a secondary school is defined as "a Day or Boarding School which offers to each of its scholars, up to and beyond the age of sixteen, a general education, physical, mental, and moral, given through a complete graded course of instruction, of wider scope and more advanced degree than that given in Elementary Schools."²

The wider educational range of district and departmental administration should ultimately enable the local authority to co-ordinate the work of education in all its branches within its own area—so that the primary may meet the secondary school at the right point—that the passage from one to the other may not be rendered unreasonably difficult,

¹ These further state that the instruction must cover a four years' course, beginning at an age not exceeding twelve. These age limits, however, do not apply to kindergartens and preparatory departments of the secondary school.

² The best definition of a Secondary School appears in the Scotch Code.

and that the earlier struggles of ex-elementary scholars in the secondary school may not be so arduous as to discourage them from continuing the course. This can probably be best effected by the "accrediting" system modified from American practice, and by the introduction in the higher classes of the elementary school of some of the studies that are taken in the lower forms of the secondary school. Examinations, however, are in this country the usual tests in the selection of scholars for secondary schools.

The American Ladder.—The golden ladder that enables the poorest American child to ascend through the various educational stages and finally reach the university has many of its rungs missing in most parts of this country. Those, however, who ascend the ladder here manage to negotiate the gaps, which act as deterrents to many young aspirants.

To illustrate the American ladder, it is well to indicate roughly the various steps that may be considered to be open to every boy and girl in the United States:—

- (1) The kindergarten, for children between four and six years of age.
- (2) The elementary school, for children between six and fourteen years of age.
- (3) The high school, for those between fourteen and eighteen years of age.
- (4) The college or university, for persons between eighteen and twenty-two years of age.
- (5) The post-graduate course at the University, for persons between twenty-two and twenty-six years of age.

The kindergarten schools have not been established many years. Attendance at them is generally voluntary, but the demand for admission is so great that buildings

cannot be established fast enough to meet it adequately. It may be said—though the compulsory law varies in different States—that, as a rule, the elementary school represents the only compulsory form of American education, the highest upward limit of age being sixteen for enforced attendance, while most of the States make the upward limit fourteen.

Having “graduated,” or passed through the complete course of the elementary school, the American child may then go to the high school for a four years’ course of instruction, which is usually finished at the age of eighteen or nineteen, though he may remain there, as a rule, until twenty-one if unable to complete the course before. Having finished this course he is said to have “graduated” at the high school, and receives a certificate to that effect. He is then at liberty to enter college and obtain an academic degree, which is usually conferred, not on the results of an examination, but rather on the student’s record of successful work during the various college terms.

The post-graduate course, which comprises technical instruction of a highly specialised character, not easily within the range of everyone, is taken in connection with one of the many professional schools of the university. Some students take this course between the ages of eighteen and twenty-two, when the ordinary academic course has been omitted.

This, then, is substantially the American educational staircase that leads to the hall of culture and to professional or technical skill. The ways and means must now be briefly recorded. As each State makes its own laws, there are necessarily some variations in the educational system. Free education is, however, general up to eighteen years of age. In some States it is free up to twenty-one years, and even practically beyond that. Attendance at all schools

other than elementary is purely voluntary ; but in order to go forward and upward, the student must have "graduated" or completed each preceding course. Even the college or university training is free in the Western "State" universities, and nearly free elsewhere.

Though the primary schools are "end on" to the high schools, the point of juncture is not quite satisfactory to the Americans themselves. On the other hand, the connecting link between the high schools and the colleges or universities is both sound and strong. In the former case, something is being done in the way of introducing into the higher classes of the elementary school a few of the subjects taught in the secondary school, and by a system of conferences and interchange of visits between the teachers of these two institutions. As to the relations between the high schools and the colleges, a system of nomination or "accrediting" is widely adopted, with eminently beneficial results. Some of the universities, however, still exact an entrance examination.

The "accrediting" system consists in attaching a certain number of high schools to the university in order that they may act as contributory institutions. For this purpose university professors pay visits of inspection to the high schools at various times, with the view of testing their methods and general efficiency. Institutions approved on the basis of these visits are accredited to the university, with the result that local nomination of the high school graduates is accepted by the university in lieu of examination. In this way the ideals in the highest seats of learning are brought into contact with the secondary schools, which in their turn might well be in similar touch with the elementary schools.

Scholarships, more limited in America than in this country, and confined practically to the universities, are

also mostly awarded on a nomination basis. They are either directly awarded on the results of enquiry into the needs, character, and ability of a candidate, or the university attaches a few scholarships to each of its "accredited" high schools, and allows those in authority over such places to select their own nominees.

Home Administration.—The action of the Board of Education¹ in setting the standard and limitations for the secondary schools and other institutions of higher education, and in demanding that about 20 per cent.² of the accommodation in the former schools shall be reserved as "free places" for pupils entering from the elementary schools, points to a new educational era. The Board are clearly feeling their way, evidently intending at present to leave as large a measure of initiative as possible with the local education authority, now endowed with such wide and far-reaching powers.

The local education authority may now, under conditions, provide for the educational needs of every section of the community. It must also see to the proper co-ordination of the work of the various institutions under its control and exercise a general supervision over them.

The machinery of government is necessarily complex. In the first place, the local authority is under statutory obligation to enforce attendance at school of all children from five to fourteen years of age resident within the area, and to provide efficient accommodation and a suitable staff for their instruction. Each authority is empowered to make its own bye-laws for purposes of attendance.

Under the Education Act³ 1902 the Council of every

¹ See Regulations for Secondary Schools. ² *Ibid.*, Chap. IV. (20).

³ Applicable to England and Wales. A further Education Act 1903 extended and adapted the 1902 Act to London.

county and of every county borough is the local education authority. There are certain qualifications, however, concerning boroughs and urban districts, based on population.¹

Elementary Education.—'The local education authority has the powers and duties of school boards and school attendance committees under the Elementary Education Acts 1870 to 1900 and any other Acts, and is responsible for, and has the control of, all secular instruction in public elementary schools not provided by the said authority.

All public elementary schools provided by the local authority must, when that authority is the council of a county, have a body of managers consisting of a number not exceeding four appointed by that council, and a number not exceeding two appointed by the minor local authority. Where, however, the local authority is the council of a borough or urban district, it may appoint for any school provided by it a body of managers consisting of any number it may determine.

Public elementary schools not provided by the local authority must have a body of managers consisting of not more than four foundation² managers appointed in accordance with the provisions of the Education Act 1902, together with two³ other managers.

The local education authority must maintain and keep efficient all public elementary schools within its area which are necessary, and have the control of all expenditure required for that purpose, other than expenditure for which, under the Education Act 1902, provision is to be made by the managers; but, in the case of a school not provided by the local authority, only so long as the following conditions and provisions are complied with:—

¹ Act 1902, Part I.

² See Education Act 1902, Section 11.

³ *Ibid.*, Part III., Section 6 (2-3).

(a) The managers of the school must carry out any directions of the local education authority as to the secular instruction to be given in the school, including any directions with respect to the number and educational qualifications of the teachers to be employed for such instruction, and for the dismissal of any teacher on educational grounds; and if the managers fail to carry out any such direction the local education authority shall, in addition to their other powers, have the power themselves to carry out the direction in question as if the said authority were the managers; but no direction given under this provision shall be such as to interfere with reasonable facilities for religious instruction during school hours.

(b) The local education authority shall have power to inspect the school.

(c) The consent of the local education authority must be obtained to the appointment of teachers, but that consent may not be withheld except on educational grounds; and the consent of the authority is also necessary for the dismissal of a teacher, unless the dismissal be on grounds connected with the giving of religious instruction in the school.

(d) The managers of the school must provide the school house free of any charge, except for the teacher's dwelling-house (if any), to the local education authority for use as a public elementary school, and must, out of funds provided by them, keep the school house in good repair, and make such alterations and improvements in the buildings as may be reasonably required by the local education authority; provided that such damage as the local authority considers to be due to fair wear and tear in the use of any room in the school house for the purpose of a public elementary school shall be made good by the local education authority.

(e) The managers of the school must, if the local educa-

tion authority has no suitable accommodation in its own schools, allow that authority to use any room in the school house out of school hours free of charge for any educational purpose, but this obligation shall not extend to more than three days in the week.

The managers of a school maintained but not provided by the local education authority, in respect of the use by them of the school furniture out of school hours, and the local education authority in respect of the use by them of any room in the school house out of school hours, shall be liable to make good any damage caused to the furniture or the room, as the case may be, by reason of that use (other than damage arising from fair wear and tear), and the managers shall take care that, after the use of a room in the school house by them, the room is left in a proper condition for school purposes.

If any question arises under Section (7) of the Education Act 1902 between the local education authority and the managers of a school not provided by the authority, that question shall be determined by the Board of Education.

One of the conditions required to be fulfilled by an elementary school in order to obtain a parliamentary grant shall be that it is maintained under and complies with the provisions of Section (7).

In public elementary schools maintained but not provided by the local education authority, assistant teachers and pupil teachers may be appointed, if it is thought fit, without reference to religious creed and denomination, and, in any case in which there are more candidates for the post of pupil teacher than there are places to be filled, the appointment shall be made by the local education authority, who may determine the respective qualifications of the candidates by examination or otherwise.

Religious instruction given in a public elementary school not provided by the local education authority shall, as regards its character, be in accordance with the provisions (if any) of the trust deed relating thereto, and shall be under the control of the managers: provided that nothing in this sub-section shall affect any provision in a trust deed for reference to the bishop or superior ecclesiastical or other denominational authority so far as such provision gives to the bishop or authority the power of deciding whether the character of the religious instruction is or is not in accordance with the provisions of the trust deed.

The managers of a school maintained but not provided by the local education authority shall have all powers of management required for the purpose of carrying out the Education Act 1902, and shall [subject to the powers of the local education authority under Section (7)] have the exclusive power of appointing and dismissing teachers.

The power to provide instruction under the Elementary Education Acts 1870 to 1900 shall, except where those Acts expressly provide to the contrary, be limited to the provision in a public elementary school of instruction given under the regulations of the Board of Education to scholars who, at the close of the school year, will *not be more than sixteen years of age*: provided that the local education authority may, with the consent of the Board of Education, extend those limits in the case of any such school if no suitable higher education is available within a reasonable distance of the school.¹

The powers of a council under the Education Act 1902 may include the provision of vehicles or the payment of reasonable travelling expenses for teachers or children attending school or college whenever the council may con-

¹ This is Section 22 (2) of the Education Act 1902.

sider such provision or payment required by the circumstances of the area or of any part thereof.

Further, under the Education (Administrative Provisions) Act 1907—

The powers and duties of a local education authority under Part III. of the Education Act 1902 shall include (1) a power to aid by *scholarships or bursaries* the instruction in public elementary schools of scholars from the age of twelve up to the limit of age fixed for the provision of instruction in a public elementary school by Section 22 (2) of that Act.

(2) A power to provide for children attending a public elementary school, *vacation schools, vacation classes, play-centres*, or other means of recreation during their holidays or at such other times as the local education authority may prescribe, in the school house or in some other suitable place in the vicinity, so far as the local education authority, in the case of a school house or place not belonging to them, can obtain for the purpose the use of the school house or place.

(3) A duty to provide for medical inspection.¹

Higher Education.—The local education authority must consider the educational needs of the area and take such steps as seem desirable, after consultation with the Board of Education, to supply or aid the supply of education other than elementary, and to promote the general co-ordination of all forms of education: provided that the amount raised by the council of a county for the purpose in any year out of rates under the Education Act 1902 shall not exceed the amount which would be produced by a rate of twopence in the pound, or such higher rate as the county council, with the consent of the Local Government Board, may fix.

¹ See pp. 303 and 324 *supra*.

Concurrent Powers of Smaller Boroughs and Urban Districts.—The council of any non-county borough or urban district has power, as well as the county council, to spend such sums as it thinks fit for the purpose of supplying or aiding the supply of education other than elementary: provided that the amount raised by the council of a non-county borough or urban district for the purpose in any year out of rates under the aforesaid Act shall not exceed the amount which would be produced by a rate of one penny in the pound.

Religious Instruction.—A council, in the application of money under Part II. of the aforesaid Act, shall not require that any particular form of religious instruction or worship or any religious catechism or formulary which is distinctive of any particular denomination shall or shall not be taught, used, or practised in any school, college, or hostel aided but not provided by the council, and no pupil shall, on the ground of religious belief, be excluded from or placed in an inferior position in any school, college, or hostel provided by the council, and no catechism or formulary distinctive of any particular religious denomination shall, etc.

In a school or college receiving a grant from, or maintained by, the local education authority under Part II. of the Education Act 1902, a scholar attending as a day or evening scholar shall not be required, as a condition of being admitted into, or remaining in the school or college, to attend or abstain from attending any Sunday school, place of religious worship, religious observance, or instruction in religious subjects in the school or college or elsewhere: and the times for religious worship, or for any lesson in a religious subject, shall be conveniently arranged for the purpose of allowing the withdrawal of any such scholar therefrom.

The power to supply, or aid the supply of, education other than elementary includes a *power to train teachers*, and to supply, or aid the supply of, any education except where that education is given at a public elementary school.

The power of a council to *supply or aid the supply of education, other than elementary*, shall include power to make provision for the purpose outside the area in cases where it is considered expedient to do so in the interests of the area, and shall include power to *provide or assist in providing scholarships for*, and to pay or assist in paying the fees of, students at schools or colleges or hostels within or without that area.

From these generalisations it will be seen what heavy responsibilities and far-reaching powers devolve upon the local education authority: but these are by no means all. The Children Act 1908, for example, wherein are codified many previous Acts concerning the care and education of children, throws additional responsibilities on the local authority.

The detail, however, in the work of administration, is almost endless. After the general principles have been determined upon which the authority has decided to act, there remain the rules and regulations to be framed for the guidance of all concerned in the administration of the area. The duties of managers, teachers, and other officers must be defined and codified; principles must be established that shall govern expenditure in every department of the work; the number and length of vacations must be determined; school hours must be defined and definite provision made for the training of pupil and student teachers.

Some provision must also be made for centralised instruction in handicraft, domestic and other subjects;

and the conditions determined under which inter-departmental promotions are made, and drafts to institutions of higher rank carried out. Many education authorities have thought it necessary also to give clear definition to the principles that should underlie Scripture instruction, to name some subjects as obligatory in various types of schools, to indicate the minimum times per week to be devoted to certain other subjects such as singing, physical exercises, drawing, etc., to have a regular time throughout the area for the closure of registers, and to draw up a formal set of rules for the administration of corporal punishment. Again, in some areas the authority has decided that home-lessons shall be optional, and that detention after school hours, beyond say half-an-hour, shall not be allowed.

It is obvious from this brief recital—many other matters might be included—that the local authority can do much to make or mar the efficiency of education within its area.

Reservation of Places.—It is necessary to have an officially recognised accommodation¹ for each school or department; and the average attendance for the school year must not exceed the number representing that accommodation². It is clear therefore that the number of pupils in a department—the number on the roll—may exceed the number of places for which that department is recognised. The Board of Education do not say what that excess may be, but make a general provision to the effect that “no room may be *habitually* used for a larger number of scholars than that for which it is passed by the Board.”³ It thus becomes necessary for the local authority to give numerical values to the maximum excess. A fixed percentage might suit one area but not another, the conditions of labour and

¹ Art. 17 (c). ² Art. 19. ³ Art. 19.

attendance being different; it might also prove equally unsuitable to two schools in the same borough for similar reasons. It is desirable, however, to have a rule for guidance in order to prevent (a) possible overcrowding, (b) waste of places, (c) a block in the flow of promotion from one department to another, and (d) admissions from the outside when there is the certainty of a draft of scholars from a junior department in the near future.

"The percentage of excess over the accommodation of a department that has proved a workable arrangement in one large educational area is as follows:

For boys' departments 5 per cent.—if the accommodation is 300, the roll limit would be 315.

For mixed departments 6 per cent.

For girls' departments 7 per cent.

For infants' departments 10 per cent.

Some variations are allowed to meet the requirements of particular schools, e.g. a boys' department that secures a yearly percentage of attendance of 97 or 98 would have its roll limited by 3 per cent. or 2 per cent. These figures have been determined *a posteriori*.

A rule of this nature cannot, however, operate at all periods of the year except in infant schools and similar junior departments. Most inter-departmental promotions are usually made, for example, at the close of the educational year. Places must therefore be reserved in the senior department at that and other times when such promotions are projected, in order that the infant draft of scholars may find accommodation there, without exceeding the roll limit. The particular period of the year when external admissions must be stopped or checked for this purpose is not generally named by the local authority, because the circumstances of each school may vary so greatly; but the question is left to the discretion of the head teacher, who

must, of course, show, when necessary, that he has acted on reasonable grounds. The principle is sound that those who are *in* the school should have a prior claim to those who are outside.

The local education authority may also demand the reservation of places in secondary schools within its jurisdiction for certain scholars from the elementary schools.

Scholarships.—The local authority is empowered to provide a scheme of scholarships by which a pupil may proceed by stages from the elementary school to institutions of higher rank, even to the university. Every child whose ability and character justify a more advanced education than parents or guardians are able to provide, should have opportunities, subject to certain limitations and in competition with others, of securing scholarships with sufficient pecuniary emoluments attached thereto to enable him to obtain that kind of education best suited to his needs and capacities.

The trend of most scholarship schemes may be best seen by giving a brief outline of those in existence in one large educational area.¹ They are, however, probably more complete than those in most other localities.

There are three kinds of scholarships:

- (1) *County*—graded into (a) Junior County,
(b) Supplementary Junior County,
(c) Intermediate County,
(d) Senior County.

- (2) Technical and Trade.

- (3) Scholarships for those preparing for the teaching profession.

¹ County of London.

Nomination and a competitive examination are necessary in most cases.

Junior County scholarships are awarded to children between the ages of 11 and 12, are tenable in the first instance for three years, and are renewable for a further two years in the case of scholars who show ability to profit by further secondary education. They cover free education at a secondary school, together with, in most cases, maintenance grants. At the end of the five years' tenure, the scholar may continue at school as a free pupil, but receives no maintenance grant.

The supplementary scholarships are awarded to children of the age of 13 who, because of late development or other good reason, miss the Junior County scholarship.

The Intermediate scholarships are open to candidates from 16 to 17 years of age; they cover free education at a secondary school or other institution for higher education until the end of the school year in which the scholar attains the age of 18, and can under certain conditions be extended for a further year. Maintenance grants are in most cases attached to the scholarships.

The Senior scholarships are intended for candidates of the age of 18 and upwards who desire to pursue a course of study at an institution of university rank. They vary in value according to the circumstances of the candidates and the course of study which they intend to pursue. They are not awarded as a result of examination, but after consideration of the candidates' records and reports from their teachers, the local authority, however, reserving the right to examine candidates, if it thinks fit. The scholarships are, as a rule, only awarded to candidates who have won some other scholarship tenable at an institution of university rank.

The *Technical and Trade* scholarships are intended to

afford opportunity of learning the theory and practice of some skilled trade. They may be divided into two classes, those intended to prepare boys and girls to enter the trade in question and those intended to give to artisans and others already in the trade a fuller knowledge of subjects bearing upon their work.

Trade scholarships provide a course of training at a trade school for two, or in some cases for three, years. The usual age of admission is 14. The trades in which instruction is given are engineering, cabinet-making, wood-carving, cookery, building, book production, silversmithing, etc., for boys, and dressmaking and other needle trades, including upholstery and millinery, photography and laundrywork for girls.

In addition to the trade scholarships, there are domestic economy scholarships for girls leaving the elementary schools at the age of 14, which provide a one or two years' course of training in domestic work.

Somewhat similar to the trade scholarships are scholarships for blind, deaf, or crippled children, the object of which is to help physically defective children to learn a trade by which they may ultimately become self-supporting.

On the *Technical* side there are (1) scholarships and (2) exhibitions.

The scholarships provide for full time study in the day time at an institution giving advanced instruction in science and art. They are intended for persons who have already begun their life's work, but who are willing to give up their occupation for a certain period in order to devote their whole time to the study of some branch of science or art bearing upon their work. Maintenance grants up to £50 a year may be attached to the scholarships.

The exhibitions are intended to assist artisans who

desire to attend evening classes on subjects bearing on their trade. They provide free admission to the course chosen, and, in addition, carry a small grant to cover travelling and other incidental expenses.

The third kind of scholarship provides a scheme, by means of which a boy or girl may proceed by various stages from the public elementary school to a training college for teachers.

The local authority gives assistance to enable students to undertake a course of training. As regards education up to the age of 16, assistance is given by means of the County scholarships. The Junior County scholarship is tenable, subject to satisfactory progress, for five years, and the candidate is not pledged to become a teacher.

On attaining the age of 16, the candidate for the teaching profession usually spends half the two years, prior to admission to college, in continuing his or her general education at a secondary school and half in practice in teaching in an elementary school. If the first year is spent continuously in the secondary school and the second year in the elementary school, the candidate is called a "bursar" during the first year and a "student teacher" during the second year.

On attaining the age of 18 and passing one of the examinations required by the Board of Education for the purpose, the candidate is eligible to enter a training college.

Children's Care Committees.¹—The provision of food for *necessitous* school children is now practically a charge upon the rates. The local education authority is empowered by the Education Act 1906 (Provision of Meals) and the Education Act 1907 (Administrative Provisions) "to defray the cost of food furnished in meals," under

¹ See L.C.C. Handbook on Children's Care Committees.

certain conditions, to any elementary school children within its area who are "unable, by reason of lack of food, to take full advantage of the education provided for them"; and further, it has "the power to make such arrangements as may be sanctioned by the Board of Education for attending to the health and physical condition of the children educated in public elementary schools."¹ These and the further responsibilities thrown upon the local authority by the Children Act 1908 make the formation of local *Care* Committees imperative, the functions of such committees consisting not only in feeding the children, but also in an active interest in their general welfare, co-operating with existing agencies and with parents in order that the children may be befriended in many ways.

The position perhaps will be made clear by citing the first three sections and the sixth section of the Education Act 1906:—

1. *Power of Local Education Authority to aid School Canteen Committees in the Provision of Meals for Children.*
—A local education authority under Part III. of the Education Act 1902 may take such steps as they think fit for the provision of meals for children in attendance at any public elementary school in their area, and for that purpose—

- (a) may associate with themselves any committee on which the authority are represented, who will undertake to provide food for those children (in this Act called a "school canteen committee"); and
- (b) may aid that committee by furnishing such land, buildings, furniture, and apparatus, and such

¹ Education Act 1907, Sec. 13 (1) b.

officers and servants as may be necessary for the organisation, preparation, and service of such meals;

but, save as hereinafter provided, the authority shall *not* incur any expense in respect of the purchase of food to be supplied at such meals.

2. *Recovery of the Cost of Meals.*—(i) There shall be charged to the parent of every child in respect of every meal furnished to that child under this Act such an amount as may be determined by the local education authority, and, in the event of payment not being made by the parent, it shall be the duty of the authority, unless they are satisfied that the parent is unable by reason of circumstances other than his own default to pay the amount, to require the payment of that amount from that parent, and any such amount may be recovered summarily as a civil debt.

(ii) The local education authority shall pay over to the school canteen committee so much of any money paid to them by, or recovered from, any parent as may be determined by the authority to represent the cost of the food furnished by the committee to the child of that parent, less a reasonable deduction in respect of the expenses of recovering the same.

3. *Power of Local Education Authority to Defray the Cost of Food in Certain Cases.*—Where the local education authority resolve that any of the children attending an elementary school within their area are unable, by reason of lack of food, to take full advantage of the education provided for them, and have ascertained that funds other than public funds are not available or are insufficient in amount to defray the cost of food furnished in meals under this Act, they may apply to the Board of Education, and that Board may authorise them to spend out of the rates

such sum as will meet the cost of the provision of such food, provided that the total amount expended by a local education authority for the purposes of this section in any local financial year shall not exceed the amount which would be produced by a rate of *one halfpenny in the pound* over the area of the authority, or, where the authority is a county council (other than the London County Council), over the area of the parish or parishes which in the opinion of the Council are served by the school.

6.* *Provision as to Teachers*.—No teacher seeking employment or employed in a public elementary school shall be required as part of his duties to supervise or assist, or to abstain from supervising or assisting, in the provision of meals, or in the collection of the cost thereof.

It will be seen that existing agencies should be utilised and voluntary effort and contributions encouraged. It has become generally advisable therefore to have three distinct but inter-dependent organisations consisting of:

(1) A Care Committee for each school (*School Committee*).

(2) A Care Committee for a district or locality (*District Committee*).

(3) A Central Care Committee formed from the members of the Education Committee that exercises a controlling power over all.

The duties of the School Committee (consisting chiefly of local managers) should be:—

(1) To report to the Central Committee (i) all children found in circumstances which apparently render it desirable that they should be dealt with under Part II. (section 12 (1)) of the Children Act 1908, with a view to action being taken for the safety and protection of the children, and for the punishment of the parents or guardians, and

* The number of the Section in the Act of 1906 is preserved.

(ii) every child who apparently comes within the provisions of Part IV. (section 58 (1) (d)) of the Children Act 1908, viz. is under the care of a parent or guardian who by reason of criminal or drunken habits is unfit to have the care of the child.

(2) To determine what children are necessitous.

(3) To see that no child in want fails to receive food.

(4) To appoint individual members to visit the homes and thus endeavour to improve home conditions by talks with the mothers.

(5) To report cases where children appear to be over-worked out of school hours, or to be working under unhealthy conditions.

(6) To endeavour to persuade parents to obtain the advice and treatment recommended in the medical register of the school.

(7) To encourage thrift and, where possible, to institute clubs and arrange for recreation out of school hours.

(8) To keep in touch with beneficent agencies and to pass on cases to that agency best suited to deal with them.

(9) To advise and help parents in the after-employment of their children, to refer suitable cases to the local apprenticeship committees and labour exchanges, and generally, by advice and guidance, to exercise a watchful care over children on leaving school.

The District Committees should consist of a certain number of representatives from the School Committees, in addition to others nominated by associations interested in the work. Briefly their duties should be: (1) To collect voluntary contributions, (2) to disburse sums so collected and advances (if any) made by the local authority, (3) to arrange and manage the feeding centres, (4) to consider what methods shall be employed in after-care and especially in placing children in suitable positions on leaving school,

and (5) to report to the Central Committee from time to time.

But in addition to the organisations needed for the feeding and general care of necessitous children, provision should also be made by the local authority, where facilities exist, for the dining comfort of scholars whose homes are distant, or those otherwise compelled at times to partake of their dinners on the school premises. It is extremely important that tidiness, cleanly habits, and little acts of service to one another should be associated with meals. In some localities the dining table¹ and its appurtenances have their temporary place in hall or class-room for this purpose. Thus those scholars who wish to have a dinner at a trifling cost, and others who bring their food with them, are able to partake of their meals under proper conditions.

Consultative Committees.—In America committees, consisting chiefly of head masters and mistresses, are called into existence by the education authority to undertake certain advisory duties in connection with educational questions.

At home, the utility of committees of this type is recognised in some large areas.

In one great centre,² for example, two *Local* Consultative Committees have been established in each electoral area by the education authority, one for masters and the other for mistresses. There are also two *Central* Consultative Committees differentiated on the same lines.

The *local* committees consist of head masters and mistresses of the public elementary schools, secondary schools, pupil teacher centres, principals of colleges (if any), and

¹ Cloth-covered boards and trestles.

² County of London.

the senior assistant in mixed schools within the locality or electoral area. It is their duty to consider matters referred to them by the education authority or its chief officer and to report accordingly.

The Masters' Central Committee is composed of the chairmen of the corresponding *local* committees; and the Mistresses' Central Committee consists of the chairmen and vice-chairmen of the *local* Mistresses' Committees.

° The agenda for each Central Committee is prepared by the local authority. It usually contains a digest of the resolutions adopted by the local committees and any other matters calling for special and representative consideration.

Combinations of Schools mostly for purposes other than Co-ordination.—Such combinations may be promoted directly by the local authority, by one of its officers, or by the teachers of the district with that authority's sanction and approval. Combinations due chiefly to unofficial or semi-official enterprise are:—(1) Swimming Associations. (2) Athletic Sports Associations. (3) Literary Societies. (4) Naturalist Clubs. (5) Choral Unions. (6) Social gatherings, etc.

When municipal baths, the river or the sea are reasonably near and otherwise suitable for the purpose, swimming forms part of the school instruction in the summer months, especially in the case of boys' departments. It has been found a valuable incentive both to collective and individual effort to have a school swimming association for the district, and for such association to organise competitions among the schools, and to award certificates, medals, etc., to teachers for skill, and to scholars for progress, in the aquatic art. The work of the London Schools' Swimming Association, whose aid is invoked by the education authority in matters that concern the organisation of swimming in

day and evening schools, is an example of what may be accomplished in this way.

In a similar manner and with equally satisfactory results, a sports association, with its cricket and football branches, has had its value enhanced by a district organisation. A junior naturalists' club,¹ for either boys or girls or both, has been found in many instances to be an effective force in school life. Under careful direction and management it should prove in every senior department an instrument of great educational power.

Literary or choral societies are suitable for the evening schools. The choral unions of the London evening classes have been a great success. Each large district has formed such a union. Arrangements are made for all schools within the Association to study, during the session, selected pieces of classical or semi-classical music. Partially or wholly combined rehearsals take place at intervals, and towards the close of the session a musical festival is held by the combined schools.

It is suggested that two or more day schools might profitably join hands to promote simple lectures on the easier English classics for the older scholars. An occasional "evening" with Longfellow, Tennyson, Dickens, and others, to which the parents could be invited, and in which both teachers and scholars would take part, should prove very effective. This experiment has been tried in some day and evening schools with success. In the day schools, however, it more commonly takes the class-room form of entertainment.

A Shakespeare Club, a Tennyson Club, etc., formed by the upper class scholars of the day school, to study, in an organised form, the works of the author after whom the club is named, has excited a lasting interest in literature,

¹ This has been tried in America with success.

and has otherwise been productive of an immense amount of good. Much of the work associated with clubs of this kind is done at home by independent effort on the part of the scholars, the teacher directing and stimulating them from time to time at school.

Among official combinations of schools are the following:—

- (1) Combinations for purposes of lantern illustrations.
- (2) " of evening classes with day schools.
- (3) " for subjects taught at centres.
- (4) " for prize distributions.
- (5) " for management—local managers.
- (6) " for exhibitions.
- (7) " for examinations (scholarships, etc.).
- (8) " for interchange of letters between senior pupils.

Some of these need a word of explanation.

With the view of giving effective illustration to lessons in Geography and History, the late authority for London allowed not more than twenty senior departments to combine to form a circle. One central school was selected as a centre for lantern slides and books of reference. A committee of the head teachers drew up courses of instruction in the two subjects, wide enough to admit of adjustment to the needs of any school within the circle. Suitable lantern slides were supplied to fit in with these courses, usually in boxes containing from ten to eighteen slides. Then, by means of a scheme of rotation, every school obtained the box of slides it needed at the right time. Each school was, of course, supplied with a good lantern and all accessories. This arrangement has worked extremely well. It has been the chief means of exciting a stronger interest in these two important subjects.

Association of day with evening schools has taken mostly the contributory form. The practice has been, in some areas, to attach a certain number of day senior departments to each evening school, the head teachers of the former supplying monthly, or at other stated periods, lists of scholars who were about to leave or had left the school and were no longer under the obligation of further attendance. It is then the duty of the responsible teacher of the evening school to communicate with the scholars or ex-scholars named on the list with the view of securing their attendance at school in the evenings.

The centre system of instruction in such subjects as woodwork, cookery, and laundry necessitates an organised combination of schools, so that the centre may be fully utilised and the least possible inconvenience caused to the departments sending classes there.

With regard to the local managers,¹ it is usual to group three *Council* schools together and place them under the management of one local committee. As a rule, each non-provided school has its own committee of managers.²

Interchange of Letters.—It is well for schools to combine for this purpose so that each willing scholar in the upper parts of the school may have a correspondent in some other school, no matter how remote. In this way London may write to Edinburgh, York to Canterbury, Birmingham to Liverpool, Manchester to New York. It is probably best, though it is not a material point, for towns that are widely different in character to join hands in this way, e.g. Bradford with Grimsby, Newcastle with

¹ The constitution of these committees varies. See Education Acts 1902, 1903.

² By Section 12 of the Education Act 1902 a number of voluntary or non-provided schools can be "grouped" under one body of managers.

Nottingham, Swansea with Kidderminster, Manchester with Plymouth, and so on.

A scheme for interchange of letters on these lines is in operation in some areas. In the county of London it has been in existence some years, the correspondence being officially limited beyond the United Kingdom to America, Germany, Japan, and the British Colonies. There is nothing, however, to prevent head teachers supplementing this scheme by acting on their own initiative and responsibility. The chief points in the London scheme are:—(1) The first letters are, as a rule, written abroad and are distributed by the Education Department of the Council among the various schools that have expressed a wish to join in the scheme. (2) Replies are then sent either direct or through the Education Offices, according to arrangements made by the controlling authorities at each end. (3) When the initial letters are written in London they are forwarded in school batches to the Education Department of the Council, and thence transmitted to the corresponding department abroad. After the first letter, however, communications are sent direct, under the supervision of the head teacher. (4) When several replies have to be sent to the same school, each is enclosed in an adequately addressed envelope, and the whole batch placed in one wrapper and forwarded to the head teacher at the other end for distribution among the scholars concerned. (5) Teachers are requested to see that the letters written by their pupils are interesting. Touches of personal history, brief accounts of places in old or new London, pressed flowers, pictures from illustrated papers, etc., coloured views of buildings in London such as are given for Reward Cards, are suggested for purposes of strengthening the correspondence link. (6) Reward Cards and suitable notepaper are

supplied to the schools. Teachers are refunded any expenditure incurred in postage.

Relation of Schools to Centres.—It is manifest that to obtain the maximum educational effect the work of the centres for instruction in domestic subjects, manual training, drawing, etc., should be correlated with the work and aim of each school sending its pupils there. The education authority should therefore lay down the general principles for the guidance of all concerned in this relationship. These principles might well take the following form. There must be drawn up for the guidance of the instructor at the centre a general syllabus, wide enough in range for a special syllabus to emerge from it, suitable to the needs of each contributory school; and that this special syllabus should be defined by the head teacher and the centre instructor in conference. On all technical points relating to the centre instruction, the specialist should have the dominant voice, but on all other matters—especially where the ground is common—the head teacher's view should prevail. The centre should be considered an integral part of the contributory school on all occasions when its scholars are under instruction there, and the head teacher should regard his visits to the centre from time to time as part of his duty—for his authority and responsibility extend as far as this, subject to the qualifications already mentioned.

Nature Study, Gardening, Drawing, etc.—The wider powers given to the local authority by the various Education Acts from 1902 onwards make it possible to open up resources hitherto practically closed for school purposes. Public recreation grounds and parks under the control of the local authority can now be brought into closer rela-

tionship with school life. The first named, for example, can be utilised for organised games by neighbouring educational establishments, and where parts of these grounds are devoted to the cultivation of flowers, plots may well be assigned to schools for gardening purposes. As far as possible, every school should have its garden on or adjoining the school premises; but in large cities and towns this is not always practicable: and in such cases the nearest public recreation ground is the most suitable place.

Gardens and gardening bring brightness into the lives of those who live in great populous centres. Parents of scholars and the public generally would be more likely to visit the recreation grounds oftener, and take a greater interest in their salient characteristics, if these places were associated with the skilful work of children—who, as a rule, take pleasure in gardening, in watching the growth of leaves and flowers, and in realising some of the results of their own powers. Gardening, perhaps, is one of the few subjects of the school curriculum that evenly holds the balance between the claims of physical and mental development, provided there is a proper adaptation of means to ends. It is, indeed, nature study in its primitive and best form.

In some localities the education authority has devised a scheme for supplying the schools, at regular intervals, with botanical specimens for nature study, drawing, and botany. In one large area these specimens, gathered from the parks and other open spaces, are sent fortnightly to the elementary schools, and weekly to secondary schools and colleges, each of which has been placed on an approved list for this purpose. The local authority, by means of a weekly official *gazette*, in which all announcements affecting the schools generally are made, names the botanical

specimens available each week; and thus teachers can requisition exactly what they want. Similarly, once a year, after due announcement, plants and cuttings from the parks and other open spaces are distributed, with the view of encouraging home gardens and home cultivation of flowers generally. In addition to these means, a yearly allowance of some shillings is made to each department—proportionally to size—to cover purchases in connection with object lessons and nature study.

Sometimes, too, when distances exceed a mile, the local authority has arranged for scholars to travel free, or at reduced fares, when either going to or from the swimming bath, in school hours or when paying educational visits¹ under the regulations of the Code.

Circulation of Books and Pictures.—Lists of suitable books having been determined, it has been both a useful and economical plan to circulate them in boxes of 20 volumes among the evening schools, *e.g.* 20 volumes of the *Tempest* or of *Ivanhoe*. A scheme of this kind prevents the accumulation of books in the school and gives the variety that is needed from term to term, or session to session, without any additional expense beyond that involved in carriage. With larger boxes and a corresponding increase in the number of volumes, this should prove an equally efficacious plan for supplying books to the upper classes of the day school.

The same principle might well be adopted by education authorities for the circulation of pictures, which under existing practices are allocated to a school for all time. They soon cease to interest or attract. Arranged in suitable sets, exchanges could, with great advantage, be carried out once a year. A freshness would then occasionally

¹ Art. 44 (b).

come into the school environment by this means, and the mental vision of both scholars and teachers would probably be extended thereby. Pictures when really good should be often made the subject of talks with the class and of lessons in composition.

A School's Secondary Function.—As it becomes necessary for the education authority to train young people for the work of teaching, so also it is necessary to have some schools wherein they can practise and learn the main principles relating to their coming profession.

Generally, when the number of educational establishments in a given area admits of a choice, only schools of the best repute should be selected for purposes of this kind of training. It is obviously important that the learner should be brought into contact with methods and work of the highest type, and with ideals that will energise and guide him to the goal he is seeking. Not only skill in exposition, but disciplinary power and a multitude of other qualities, amongst which faith should loom large, must be acquired before a broad-based efficiency can be reached.

Generally, therefore, pupil teachers and student teachers should not have their claims subordinated to school exigencies. They are placed in the schools primarily to be trained for their life's work; and though it is not possible for them to be efficiently trained without rendering some assistance to a fully qualified staff, yet this assistance should always occupy a secondary place in the organiser's mind. Indeed, it is only through this subordination that both scholars and would-be teachers can derive the greatest amount of good.

If the class master or mistress has, at times, to make some apparent sacrifices these will often prove to be blessings in disguise, for no one can train others without

learning something himself: and the freshness of youth, combined with a desire to acquire skill, is frequently an uplifting influence.

The pupil or student teacher is in touch, too, on the academic side, with the recent aspects of educational thought, and does occasionally bring into the class-room a little light that might not otherwise be there. Indeed, it may be said of all teachers and others, that where the spiritual reach is farthest—and this depends largely on direct or indirect contact with many minds—the wider must be the general outlook and the greater the probability of success in the work they are called upon to do.

It must not be supposed that the points briefly discussed in this chapter represent wholly the relationship of the local authority to the school. In almost every part of this volume will be found matters that directly or indirectly concern central or local administration. The choice of teachers, the principles of staffing, the co-ordination of schools and their equipment, the planning of buildings, and a hundred and one other considerations can scarcely be said to cover the powers and responsibilities of the local authority, which touch the school at almost every point. But nevertheless the teacher's influence must always be the dominant one. He will, however, be greatly assisted in his work of forming and strengthening character and of developing intelligence in his pupils if the local authority is moved by lofty ideals expressed in appropriate and consistent action.

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